



United States
Department of
Agriculture

Forest Service

Northeastern Forest
Experiment Station

General Technical
Report NE-74

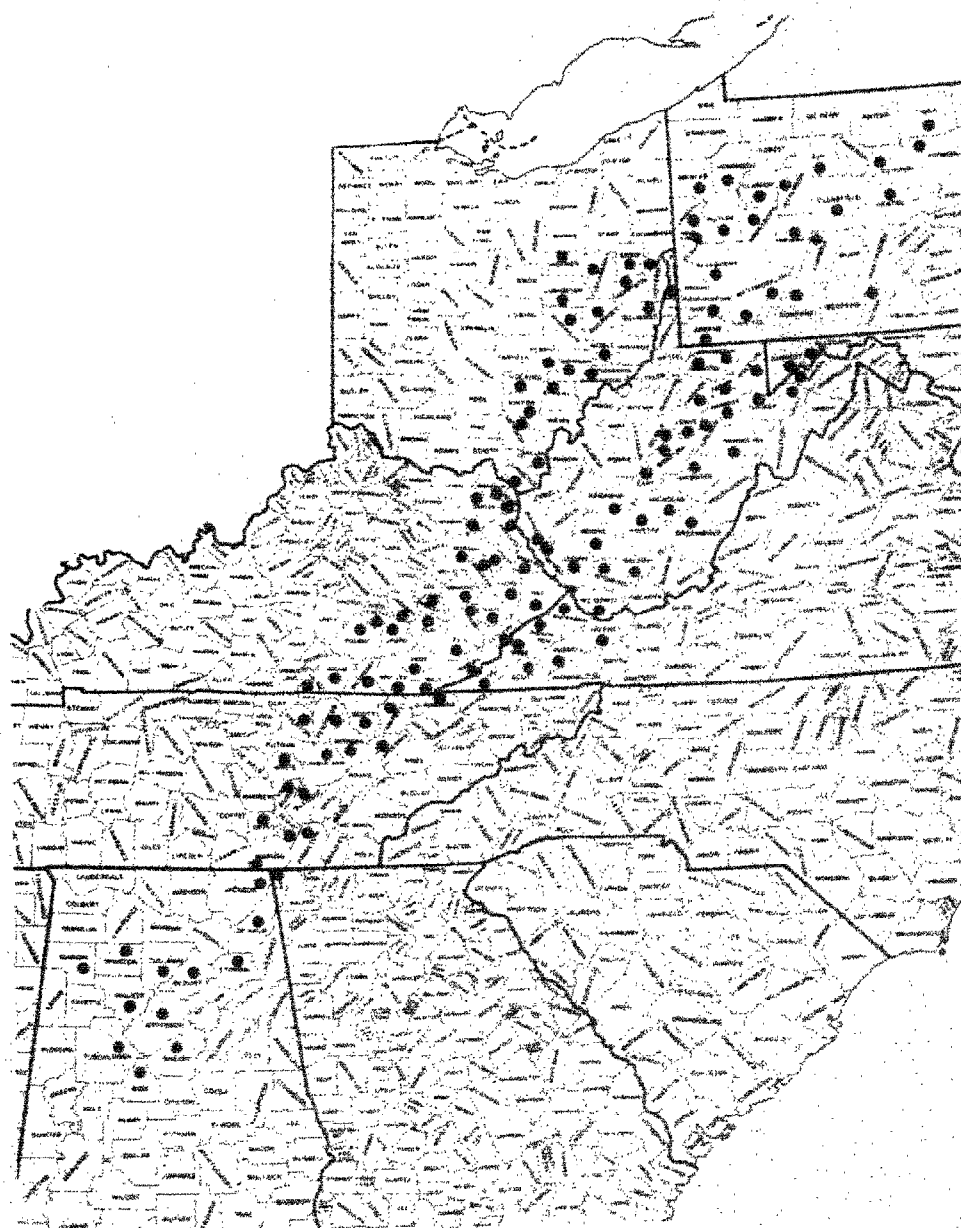
1982



Stream Water Quality in the Coal Region of Eastern Kentucky

Kenneth L. Dyer

in cooperation with Industrial Environmental Research
Laboratory, Office of Research and Development,
United States Environmental Protection Agency



STREAM WATER QUALITY IN THE COAL REGION OF EASTERN KENTUCKY

by

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This study was conducted
in cooperation with
Industrial Environmental Research Laboratory
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ABSTRACT

This report is a compilation of water quality data for 124 small streams sampled in 29 counties of eastern Kentucky where coal is surface-mined. Thirty-eight of these streams drain unmined watersheds; 86 drain areas where coal has been surface-mined. Most of these streams were sampled at approximate monthly intervals. The water quality data from these streams are presented in this report and should help fill the need for data from small watersheds in eastern Kentucky. Data reported include the common ions, alkalinity, acidity, pH, 16 trace elements, 5 nitrogen and phosphorus species, specific conductance, suspended solids, turbidity, settleable matter, water temperature and estimated discharge.

Data contained in this report should not only be useful in assessing the impacts on stream water quality of old and recent surface-mining for coal, it should also provide a data base of small reference watersheds which can serve as a basis for future studies. The report covers the period May 24, 1977 to December 10, 1979.

THE AUTHOR

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FOREWORD

When energy and material resources are extracted, processed, converted, and used, these operations usually pollute our environment. The resultant air, land, solid waste, and other pollution may adversely affect our aesthetic and physical well-being. Protection of our environment requires that we recognize and understand the complex environmental impacts of these operations and apply corrective measures.

This study was undertaken with the primary objective of establishing a water quality data base for small first-order unmined and surface-mined watersheds throughout Appalachia. There is a need for data that explicitly show changes in water quality attributable to past and recent surface mining. Most previous water quality data in the study area came from watersheds so large that it was impossible to isolate the effects of surface mining from the confounding effects of other human activities.

This report includes a compilation of water quality data for 124 small watersheds in Kentucky. Most streams were sampled at approximate monthly intervals from about June 1977 through August 1979, as part of a study of the effects of surface mining on water quality in Appalachia. Thirty-eight of these sampled watersheds were unmined; 86 contained areas that had been surface-mined for coal. These data are being released ahead of the interpretative report because of the immediate needs of many potential users.

Regulatory agencies, environmentalists, and writers of environmental impact statements will be particularly interested in these data. The water quality data base provided in this report for small reference watersheds should provide a basis for future studies and should be especially helpful in determining the probably hydrologic consequences of future mining operations.

This study was made possible by funding from the U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, Ohio, and was completed under Contract No. EPA-IAG-DE-E764 by the U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station, Broomall, Pennsylvania. The Surface-Mined Area Reclamation Research Unit of the Northeastern Forest Experiment Station in Berea, Kentucky, may be contacted for further information.

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LIST OF ABBREVIATIONS AND SYMBOLS

AL = Aluminum
B = Boron
BA = Barium
BE = Beryllium
C = Celsius
CA = Calcium
CFS = Cubic feet per second
CL = Chloride
CO = Cobalt
CO3 = Carbonate
CU = Copper
DA = Day
DEG C = Degrees Celsius
DIS SOLID = Calculated total dissolved solids
EST DISCH = Estimated Discharge
F = Filtered water sample (see Table 2)
FA = Filtered water sample preserved with nitric acid (see Table 2)
FE = Iron
FN = Filtered water sample preserved with sulfuric acid (see Table 2)
FP = Filtered water sample preserved with mercuric chloride (see Table 2)
HCO3 = Bicarbonate
JTU = Jackson turbidity units (assumed to be equivalent to both nephelometric and formazin turbidity units)
K = Potassium
KJ = Unfiltered sample preserved with sulfuric acid (see Table 2)
L (or l) = Liter
LI = Lithium
MG = Magnesium
MG/L (or mg/l) = Milligrams per liter. Essentially the same value as parts per million for concentrations given in this report.
ML/L (or ml/l) = Milliliters per liter
MO = Molybdenum (when found under the date heading MO = Month)
MN = Manganese
N = Nitrogen
NA = Sodium
NEUT RATIO = Neutralization ratio
NH3 = Ammonia
NI = Nickel
NO3 = Nitrate plus nitrite as N, determined on an unpreserved sample (sample F)
*NO3 = Nitrate plus nitrite as N, determined on a sample preserved with H₂SO₄ (sample FN)
ORTHO PO4 = Orthophosphate
P = Phosphorus
PB = Lead

PH = pH
SA = Unfiltered water sample preserved with nitric acid (see Table 2)
SETT MATTER = Settleable matter
SI - Silicon
SO4 - Sulfate
SPEC COND = Specific conductance at 25° Celsius
SR = Strontium
SUSP SOL = Suspended solids
SV = Unfiltered, untreated water sample for settleable matter analyses (see Table 2)
TEMP = Temperature
TI = Titanium
TKN = Total Kjeldahl nitrogen
TOT = Total
TURB = Turbidity
U = Unfiltered, untreated water sample (see Table 2)
UM/CM = Micromhos/centimeter
YR = Year
ZN = Zinc

ACKNOWLEDGEMENTS

The cooperation of the Kentucky Department for Natural Resources and Environmental Protection, Division of Reclamation is gratefully acknowledged. Personnel from this agency designated those areas in which sites suitable for this study might be found. Numerous individuals, including landowners and mining company representatives, cooperated in this study by helping select watersheds which met the criteria for this study, or by allowing access onto or over their land so that the samples might be taken, or both.

SECTION 1

INTRODUCTION

Surface mining throughout Appalachia is known to cause changes in the quality of water downstream from the mined areas (U.S. Army Corps of Engineers and others 1969). Numerous water quality sampling sites have been established on Appalachian streams since 1950, but most of these are on streams that drain large watersheds with multiple land uses so that it is not possible to correlate surface mining with downstream water quality.

A network of sampling sites on small first-order surface-mined and unmined watersheds throughout Appalachia was needed so that water quality data could be correlated with the type and date of surface mining, the type and date of reclamation, and the type of coal mined. These small reference watersheds should provide a good data base for future studies to aid in determining differences in stream water quality from mined and unmined watersheds, differences in the effects of various mining and reclamation techniques on water quality, and water quality recovery rates in streams that have been affected by mining.

Such a network of sampling sites was established in 1977 in the 135 Appalachian counties in nine states where coal was surface mined. The three sites initially selected in each county were to represent three watershed conditions: (1) unmined, (2) surface mined before January 1972, and (3) surface mined after January 1972. The 135 Appalachian counties which comprise the study area are mapped in Figure 1.

Starting in May 1977, 124 water sampling sites were established in the 29 counties of eastern Kentucky in which surface mining for coal was practiced. Most of these were sampled at approximately monthly intervals through July 1979.

Time was not available for a detailed examination of each watershed, so some may not now be correctly classified by mining status, dates of mining or hydrologic boundaries. The user of this report should not make crucial decisions based on these data unless the classification of the site can be verified. Verification of mining activity is of special concern as there may be old, unreported underground mine discharge in some watersheds.

Ultimately the data from throughout Appalachia should help determine which methods of surface mining are most effective in reducing the quantity of pollution reaching streams. An interpretive report covering the entire Appalachian study area is to be published later.

SECTION 2

STUDY METHODS

SITE SELECTION

A critical element in collecting valid water-quality data is site selection. Procedures and criteria used for site selection follow:

General Criteria for all Watersheds

1. A first order stream was to be selected if at all practical. A first-order stream is defined as a stream with perennial flow but without perennial tributaries. Information provided by local residents was often used to identify perennial streams. When possible, sampling sites were selected at points where flow was over bedrock to lessen the chance of contamination of samples with streambed materials, to increase likelihood of perennial flow, and to improve the discharge estimates.
2. Springs flowing from hillsides were not to be sampled.
3. When possible watersheds from 50 to 250 acres were selected.

Criteria for Unmined Watersheds

1. These watersheds were to be strictly unmined.
2. These watersheds were to have no roads or cuts which exposed bare ground. Old revegetated logging roads and skid trails were allowed.
3. These watersheds were not to be farmed, disturbed, or developed in any way.
4. Watersheds that were completely forested were to be selected if at all possible; when no completely forested watersheds were available, one that was part forest and part grassland or pasture was substituted.
5. Unmined watersheds were to be as close as possible to the mined watersheds, and as similar in aspect as possible.
6. There were to be no plans to mine or develop the watershed within the 2-year study period.

Criteria for Newly Mined Watersheds

1. No mining should have occurred before January 1972.
2. From 10 to 100 percent of the watershed should have been disturbed by surface mining after January 1972. Active surface mines were permitted on watersheds in this category. Old mines that were worked before January 1972 were permitted provided that all surfaces exposed to the atmosphere before then were completely reworked after January 1972.
3. When possible, watersheds were to be selected where only one seam of coal had been or was being mined. This was to make it possible to better evaluate the effects of mining each coal seam on water quality. Watersheds with two or more seams of coal mined were selected when these were the best available.

Criteria for Old Mined Watersheds

1. No mining or reclamation should have occurred since January 1972.
2. From 10 to 100 percent of the watershed should have been disturbed by surface mining before January 1972.
3. When possible, watersheds were to be selected where only one seam of coal had been mined. Watersheds with two or more seams of coal mined were selected when these were the best available.
4. There should be no plans for further mining or development in the watershed within the 2-year study period.

Problems in Site Selection

Site selection was carried out under severe time restraints; therefore, few of the watersheds selected met the specified criteria fully. Many of the watersheds initially classified as either old mined or newly mined have been found to be a mixture of the two. These have been arbitrarily given site classification numbers indicative of newly mined watersheds--even though in some cases the old mining may have had a greater impact on water quality.

Underground mines were prevalent over much of the area in Kentucky, making it difficult to find watersheds suitable for study there. Time was not available for close examination of the watersheds, thus some may not be what they appeared to be from the limited information then available on mining status, dates of mining, or hydrologic boundaries.

SITE NOMENCLATURE

Site Numbers

Four-digit site numbers were assigned thus:

First digit designates state:

- | | | |
|-------------|-----------------|------------------|
| 1. Alabama | 4. Maryland | 7. Tennessee |
| 2. Georgia | 5. Ohio | 8. Virginia |
| 3. Kentucky | 6. Pennsylvania | 9. West Virginia |

Second and third digits designate county:

(See Table 1 for county numbers)

Fourth digit:

0 used as needed for any watershed condition

1, 4, or 7 indicates an unmined watershed

2, 5, or 8 indicates a watershed that has been surface mined since January 1972 (surface mining may still be in progress on some of these)

3, 6, or 9 indicates a watershed that was surface mined before January 1972

Example: In site number 3012 the 3 indicates Kentucky, the 01 indicates Bell County, and the 2 designates this as a watershed on which surface mining for coal has occurred after January 1972.

Site Names

Names are taken from U.S. Geological Survey topographic maps of the 7-1/2 minute series (scale 1:24,000). The site is designated as being at a community when it is within a mile of the center of the community or within the urbanized area of the community. The site is designated as being near a community when it is more than a mile from the center of the community and outside an urbanized area.

STREAM SAMPLING PROCEDURES

Samples collected as part of this study are listed in Table 2 with treatment, time interval over which collected, and approximate volume of sample.

In addition to the samples described in Table 2 two samples of bottom material (generally rocks, sand, gravel, and/or mud) were collected from the bottoms of most streams sampled, one early in 1978 and one early in 1979. These samples were analyzed by X-ray diffraction for mineralogy and by X-ray fluorescence for major and minor elements including aluminum, calcium, iron, manganese, magnesium, potassium, silicon, and titanium. Data from the analyses of these samples are not given in this report but will be released later.

All samples were collected in plastic bottles, rinsed twice with at least 25 ml of the water being collected. Attempts were made to collect representative stream samples free of bottom material, floating debris, or material put in suspension through disturbance of the stream bottom. Unfiltered samples (KJ, SA, SV, and U) were generally dipped from flowing water or pools, but in extremely shallow streams these samples were collected with a 50-ml prerinsed syringe. When necessary, a clean thin rock was placed on the stream bottom at the collection site to avoid inadvertent collection of bottom material with the syringe.

All filtered samples were collected in a 50 ml plastic syringe and forced through a 0.45-micron type HAWG millipore filter 47 millimeters in diameter. The syringe was prerinsed with two 50 ml slugs of sample water and each filter was prerinsed with 50 ml of sample water. Filters for samples FN and FP (see Table 2 for description) were prerinsed with 200 ml of distilled water or sample water. Collection of samples F and FA generally sufficed for the prerinsing of the filters for samples FN and FP. A few samples were so muddy they could not be filtered at the site; so, liter samples of these were collected, allowed to settle a few hours, and then filtered.

Samples were refrigerated from the time they were received in Berea until they could be analyzed. As much as 2 weeks could pass between collection and refrigeration. Samples were usually stored in the refrigerator a month or two before they were analyzed in the lab. Samples were protected from freezing during the winter.

FIELD MEASUREMENTS

Field measurements were performed concurrently with stream sampling. The reported stream discharges are all listed as estimates, though in a very few cases the discharge was computed when the entire flow was allowed to fill a cup or bucket of known volume during a measured time. Discharge in cubic feet per second was generally estimated by multiplying the mean estimated cross-sectional area of flow in square feet by the mean surface velocity (estimated by movement of a floating leaf or stick) in feet per second times a roughness factor. The assigned roughness factors ranged from 0.5 to 0.9 and were designed to compensate for differences in stream channel shape and roughness.

Field pH measurements were obtained at streamside for most samples collected during the first half of the study. These were generally measured in the flowing stream unless velocities exceeded about 0.5 ft/sec, in which case they were measured at streamside in a cup of water collected for the purpose. Field pH readings were made with a Markson digi-sense pH meter, Model 5985-40, which was standardized with two buffers at each sampling site. The collection of field pH values was discontinued after we discovered that even under carefully controlled laboratory conditions the field meters were giving pH values for natural waters which, though stable, sometimes differed by as much as two whole pH units from readings taken only a few minutes before. Time was not available either to ascertain why field pH readings were inconsistent or to develop a better system for measuring. Because of the unreliability of many of these values, no field pH data are included in this report.

Water temperatures were measured with a thermometer placed in a flowing portion of the stream and are reported in degrees Celsius.

LABORATORY ANALYSES

Most analyses given in this report were determined at the laboratory of the Surface-Mined Area Reclamation Research Unit of the Northeastern Forest Experiment Station in Berea, Kentucky. Most samples of suspended solids were analyzed at Eastern Kentucky University in Richmond, Kentucky under the direction of Dr. Samuel S. Leung, Department of Geology. Special Nutrient samples collected between June 25 and September 13, 1979, were analyzed at the Argonne National Laboratory at Argonne, Illinois, under the direction of Dr. Richard D. Olsen.

An attempt was made to maintain the same analytical techniques throughout the study; however, this was not always possible. Changes and the dates they were instituted have been specified in the following discussions of individual parameters.

Elemental Analyses by Emission Spectrometer

A total of 31 elements was analyzed on the "FA" samples using a Spectraspan III emission spectrometer with DC argon plasma source. Data for 20 of these elements are included in this report. These 20 elements are tabulated in Table 3 along with approximate detection limits and approximate levels of reproducibility

Concentrations of 11 additional elements were obtained but are not published in this report because their concentrations in natural waters were generally far below the detection limits of the emission spectrometer. These elements and their approximate detection limits in mg/l are: Arsenic (3), bismuth (5), cadmium (0.5), chromium (0.1), germanium (0.1), mercury (0.05), phosphorus (0.7), selenium (0.3), silver (0.05), tin (0.2), and vanadium (0.2).

Other Analyses

Descriptions of the remaining laboratory analyses (anions, nutrients, physical parameters, and calculated values) follow in alphabetical sequence.

Acidity--

Reported as mg/l calcium carbonate equivalent and analyzed in accordance with a modification of the procedure published in Methods for Chemical Analysis of Water and Wastes (EPA 1974). A 25-ml portion of the filtered "F" sample was first acidified to pH 4.0 with 0.02 N H_2SO_4 with a Mettler autotitrator consisting of modules DK 10, DK 11, DK 12, DK 13, and DV 210. Three drops of 30 percent H_2O_2 were then added and the sample boiled for 2 to 4 minutes. Upon cooling, samples were titrated by autotitrator with either 0.02 N NaOH; or 0.1 N NaOH. Paired aliquots titrated with 0.1 N NaOH and containing less than 20 mg/l acidity as $CaCO_3$ differed from their respective means by an average of ± 2.4 mg/l while those containing more than 20 mg/l acidity as $CaCO_3$ differed from their respective means by an average of ± 6.9 percent. Paired samples titrated with 0.02 N NaOH should be in much better agreement in the lower range and in slightly better agreement in the upper range.

Negative acidity values represent excess alkalinity contributed by constituents such as bicarbonates. Negative acidities are frequently reported as zero but the negative values are needed if the final acidity of a mixed water system is to be computed from the acidities of each of its component waters. In general, the negative acidities should be fairly close in absolute value to the alkalinity concentrations, though there can be exceptions.

Acidity is normally determined on unfiltered and untreated raw water samples but such samples were not available at the end of the study when the decision was made to analyze the available samples for acidity. Only filtered samples were available then, so the acidity data reported may differ appreciably from what would have been obtained from unfiltered, untreated samples. If the sediment contained pyritic materials, as was sometimes the case in the study area, then the unfiltered samples would have been higher in acidity than the filtered samples used in this study. If the sediment contained carbonate minerals (rarely the case in the study area) then the unfiltered samples would have been lower in acidity than the values given in this report.

Alkalinity--

Reported as mg/l calcium carbonate equivalent. A 25 ml portion of the "F" sample was titrated with 0.02 N H_2SO_4 to a calculated end point using a Mettler autotitrator (described above). During the first few months of the study alkalinity was determined on 50 ml portions of the unfiltered, untreated "U" sample. After it was observed that the pH of a few of the "U" samples dropped appreciably during storage before analysis, the remaining alkalinities were determined on 25 ml portions of the "F" samples. It had been observed that the "F" samples were not only more stable than the "U" samples, but maintained pH

values that agreed more closely with field pH values. The titration was done in two steps, first to a preliminary end point at pH 5.64, then to a final computed end point based on the number of milliliters of titrant required to reach the preliminary end point. Samples with pH values less than 5.64 were assumed to have no measurable alkalinity. The end points used were essentially the same as those given by Barnes (1964, p. H15, Table 4) but minor corrections were added to account for dilution of the samples by titrant.

Alkalinities of the filtered samples used in this study may be either higher or lower than alkalinities that would have been measured in unfiltered samples, as explained in the preceding section on acidity.

During storage calcium carbonate tended to precipitate from many of those samples in which alkalinity exceeded about 100 mg/l. The reported alkalinity, carbonate, and bicarbonate values from these samples may be lower than the concentrations that would have been found had the samples been analyzed before storage.

Ammonia--

Reported as mg/l N. Ammonia was analyzed on the "FN" sample with a Technicon autoanalyzer II using industrial method number 154-71W tentative, dated February 1973. Technicon gives the detection limit for this method as 0.024 mg N/l and the coefficient of variation at 0.14 mg N/l as 0.31 percent.

Bicarbonate--

Computed from alkalinity, pH, and ionic strength using the formula:

$$\text{HCO}_3 = \frac{(1.219)(A2)(\text{HYD})(\text{ALK})}{(9.6 \times 10^{-11}) + (\text{HYD})(A2)}$$

Wherein HCO_3 is bicarbonate in mg/l, ALK is the alkalinity in mg/l calcium carbonate equivalent, HYD is the hydrogen ion concentration in moles/l computed by: $\text{HYD} = \text{antilog}(-\text{pH})$, and A2 is the activity coefficient for divalent ions computed from the equation:

$$A2 = \text{antilog} \frac{-2.034}{1 + 1.64 \sqrt{I}}$$

where I is the ionic strength (Garrels and Christ 1965, p. 61-62). The value 1.64 is the product of 0.3281 (Garrels and Christ 1965, Table 2.6) and 5 [an approximate value for major ions in the streams sampled (Garrels and Christ

1965, Table 2.7)]. This equation is valid when the total ionic concentration is less than or equal to 0.1 mole per liter and the sample temperature is near 25°C. The ionic strength, I, is defined by:

$$I = 0.5 \sum_{i=1}^n C_i Z_i^2$$

wherein n is the number of ion species, i, in the solution; C_i is the concentration in moles/l of ion species, i, in the solution; and Z_i is the charge (or valence) of the ion (Garrels and Christ 1965, p. 56).

Carbonate--

Computed from alkalinity and bicarbonate using the equation:

$$CO_3 = 0.4917 (1.219 \text{ ALK} - HCO_3)$$

wherein CO_3 is carbonate as mg/l, HCO_3 is bicarbonate in mg/l, and ALK is alkalinity in mg/l calcium carbonate equivalent.

Chloride--

Except for the last few samples chloride was determined on the "F" sample with a Technicon autoanalyzer II using industrial method number 99-70 W/B released September 1974, revised February 1976. This procedure depends on the liberation of thiocyanate ion from mercuric thiocyanate by the formation of soluble, un-ionized mercuric chloride. In the presence of ferric ion, the liberated thiocyanate forms a highly colored ferric thiocyanate proportional to the original chloride concentration. Technicon gives the coefficient of variation of this method at 5.0 mg/l as ± 0.42 percent, and the detection limit as 0.2 mg/l.

Chloride samples collected during the last 2 months of the study were analyzed on a Coulter Industrial Kem-O-Lab, model IKL, using procedures supplied with the instrument dated February 1979. This procedure uses ferric thiocyanate as the colorimetric indicator and is similar to the automated method described in Methods for Chemical Analysis of Water and Wastes (EPA 1974, p. 31-34). The detection limit is about 0.1 mg/l.

Conductivity--

See Specific Conductance

Dissolved Solids--

See Total Dissolved Solids, calculated

Neutralization Ratio--

Computed from the equation:

$$\begin{aligned}\text{Neutralization ratio} &= \frac{\text{gross alkalinity (in meq/l)}}{\text{gross acidity (in meq/l)}} \\ &= \frac{(\text{Ca}^{++} + \text{Mg}^{++} + \text{Na}^{+} + \text{K}^{+}) - (\text{Cl}^{-} + \text{F}^{-} + \text{NO}_3^{-})}{\text{SO}_4^{=}}\end{aligned}$$

wherein all ions in the water sample are reported in milliequivalents per liter (Hollyday and McKenzie 1973, p. 24-25). The neutralization ratio is unity when the gross alkalinity produced during formation and neutralization of mine drainage is equal to the gross acidity produced concurrently. A neutralization ratio greater than 1.00 indicates that the alkalinity formed was more than enough to neutralize the gross acidity from sulfuric acid released to the water by oxidation of iron sulfide.

Fluoride concentrations were not obtained as a part of this study and so were omitted from the computation of the neutralization ratios. Since fluoride rarely exceeds a few mg/l in natural waters and is low in comparison to the other ions summed in the computations, only negligible errors have been introduced by its omission.

Nitrate--

See Nitrate Plus Nitrite

Nitrate Plus Nitrite--

Nitrate and nitrite were analyzed together on the "F" sample with a Technicon autoanalyzer II using a modification of industrial method number 100-70W, released September 1973. Nitrate is reduced to nitrite by a copper-cadmium reductor column developed by Willis (1980). The nitrite ion reacts with sulfanilamide under acidic conditions to form a diazo compound, which couples with N-1-naphthylethylenediamine dihydrochloride to form a reddish purple azo dye. Technicon states that the coefficient of variation at 1.0 mg N/l is 0.31 percent and that the detection limit is 0.04 mg N/l.

The preserved "FN" samples collected late in the study were analyzed by the Argonne National Laboratory using a similar procedure (Technicon industrial method number 158-71W/A tentative, released December 1972, revised June 1977). The Argonne National Lab reported the detection limit using this method as 0.1 mg N/l.

Nitrite--

See Nitrate Plus Nitrite

Nitrogen, Total Kjeldahl--

Total Kjeldahl nitrogen was analyzed simultaneously with total phosphorus on the "KJ" sample using a Technicon autoanalyzer II and industrial methods number 376-75W/B, released November 1975, and number 334-74W/B released January 1976, both methods revised March 1977. The Argonne National Laboratory reported the detection limit using this method as 0.20 mg/l.

Orthophosphate--

Orthophosphate was analyzed colorimetrically on the "FP" sample with a Technicon autoanalyzer II using industrial method number 155-71W tentative, released January 1973. Ammonium molybdate reacts in an acid medium containing ascorbic acid and antimony to form a phosphomolybdenum-blue complex. The Argonne National Laboratory reported the detection limit using this method as about 0.01 mg/l.

pH--

Reported as pH units. The laboratory pH values were initially analyzed on the unfiltered "U" samples; but after a few months were analyzed only on the filtered "F" samples after it was observed that the latter were in closer agreement with field pH measurements than were the former. The pH value of many of the "U" samples tended to change appreciably (usually to lower pH values) during a few weeks in storage, while the pH value of almost all the "F" samples remained nearly constant for a year or more. Five different types of meters were used to measure pH values. Two of these were highly accurate while two used during the first half of the study were frequently in error, sometimes by as much as two full pH units. Questionable pH values were rerun using one of the more reliable meters when sufficient sample remained.

Phosphorus, Total--

Total phosphorus was analyzed simultaneously with total nitrogen on the "KJ" sample using a Technicon autoanalyzer II and the same methods given earlier for total Kjeldahl nitrogen. The Argonne National Laboratory reported the detection limit using this method as 0.05 mg/l.

Settleable Matter--

Settleable matter was determined as the volume of material settling in an Imhoff cone in 45 minutes, in accordance with the procedure given in Standard Methods for the Examination of Water and Waste Water (APHA 1975, p. 95-96). Precision data are not available but samples were usually read to hundredths of a milliliter. Settleable matter was determined on the approximately 1-liter "SV" sample.

Specific Conductance--

Reported as micromhos/cm at 25° Celsius. Specific conductance was determined on the "U" sample during the first few months of the study, then on the "F" sample for the remainder of the study. This change was made because some samples containing sediment increased in conductivity after a few months storage. The use of the "F" sample gave more reliable results, since most samples were stored prior to analysis. Samples collected during the first third of the study were analyzed on a Yellow Springs Instrument Company model 31 conductivity bridge which gave values reproducible to within ± 30 percent. Many of these samples were rerun on the equipment used for the later samples.

The last two-thirds of the samples were analyzed using improved techniques and a temperature-compensated Markson Electromark analyzer. Precision data are not available but sample reproducibility is about ± 2 percent.

Sulfate--

Sulfate was analyzed on the "F" sample during the first few months of the study, and on the "FA" sample during the remainder of the study. The change was made to avoid interference from the precipitate which formed in some of the unacidified samples. Sulfates were analyzed by a turbidimetric technique using Sulfaver IV powder pillows (Hach Chemical Company 1970, p. 91). Absorbance by the barium sulfate suspension was measured using a Bausch and Lomb Spectronic 20 spectrophotometer. Sulfate standards deviated as much as ± 30 percent from the known concentration when measured from this standard curve. In the latter months of the study the standard curve was calibrated daily, and data obtained during this period probably did not deviate more than about ± 15 percent from the true values.

Suspended Solids--

Suspended solids were determined gravimetrically on either the "U" or "SA" sample using Millipore 47-mm fiberglass filter paper (equivalent to about 0.45 micron pore size), and an analytical balance sensitive to 0.1 mg. Samples and filter paper were dried at 105° C for a minimum of 4 hours and cooled 1.5 hours in a desiccator before being weighed. Acidified "SA" samples were used in the beginning of the study to prevent precipitation of salts which might add to the suspended solids concentration. Unacidified samples were used after a preliminary investigation indicated that error due to precipitation of salts was negligible, and that dissolution of some of the sediment by the acid might introduce a larger error. A further inspection and analysis of "U" and "SA" samples late in the study indicated that during storage there had been appreciable precipitation of iron compounds from the more acid samples, and of calcium carbonate from the more alkaline samples. In either case this would cause the measured suspended solids concentrations to be higher than they would have been at the time the samples were collected. Unreasonably high suspended solids values were systematically deleted when field notes indicated that the streams had been

clear when sampled and when orange or yellow precipitates of iron compounds had formed before analysis. Suspended solids concentrations were less seriously affected by precipitation of calcium carbonate (most adhered to the walls of the container), so little effort was made to delete data that might have been affected by this precipitate. Samples collected during the first half of the study were stored for a year or more before analysis for suspended solids and so are more likely to have been affected by precipitates than the remaining samples, which received more prompt analysis.

The "U" and "SA" samples were collected solely for turbidity and suspended solids analyses; nevertheless, by the time the suspended solids analyses were performed an appreciable part of many of these samples had been lost--either through use in other analyses or through slow leakage from overturned containers. In both cases supernatant liquid was lost, leaving essentially all the now-settled suspended solids. All samples weighing less than 100 grams were corrected for this loss of liquid and were assumed to have weighed exactly 100 grams when collected. Suspended solids concentrations in these 100-ml samples are not highly reproducible, so errors introduced by this type of sample reconstruction should be minor by comparison. Most of these samples were collected from shallow streams and there is some evidence that the recommended collection techniques were not always carefully followed. Traces of bottom material, algae, and/or floating debris probably account for many of the higher values observed in the unmined watershed samples. Suspended solids data were deleted where there was evidence that bottom materials (generally sand and gravel) had been scooped up from the streambed during seasons of low flow. The true suspended solids concentrations should almost always be equal to or less than the reported values.

A big percentage of the samples were clear and without visible turbidity. Careful work by the author indicated that most of these should contain no more than 4 or 5 mg/l suspended solids. After a certain date, the suspended solids data generated by two of the eight analysts stand apart in that most of them run 20 to 100 mg/l higher than data by the other analysts, or data analyzed earlier by these two analysts. The data in question, 2,300 values out of a total of 6,400 analyzed can readily be identified as work of these two analysts from the data alone. Suspended solids data that ran about 40 to 100 mg/l or more above the norm for one group of 300 of these samples were deemed so defective that all of them were deleted. Most of the remaining 2,000 questionable values have been left in the various state reports but they have been marked with asterisks to indicate that they are 5 to 80 mg/l (generally 20 to 40 mg/l) higher than the true values.

Total Dissolved Solids, Calculated--

The calculated total dissolved solids value is the sum of all the dissolved constituents and approximates the quantity of dry residue that would be left after evaporation. It is assumed that all the bicarbonate is converted to carbonate and carbon dioxide when evaporated to dryness at 180° C, so the bicarbonate is multiplied by 0.4917 to give an estimate of residual carbonate. The silicon value is multiplied by 2.142, on the assumption that silicon dioxide residue is left upon evaporation.

Turbidity--

Reported as Jackson turbidity units (JTU)--equivalent to formazin or nephelometric turbidity units. Turbidity was measured on the "U" samples except for a few measured on "SA" samples. Transmittance of light through the sample contained in a 1-inch test tube was measured at a wavelength of 450 nanometers with a Bausch and Lomb Spectronic 20 spectrophotometer. Turbidity was determined from transmittance using a table prepared by the Hach Chemical Company (1970, p. 97). This table was prepared from standard formazin solutions calibrated with a Jackson candle turbidimeter. Recent checking indicates that this table is not very suitable for analysis of natural water samples in that values obtained in the more turbid samples were highly dependent upon the dilution chosen. Turbidities computed from a transmittance of 80 would be about double those computed from a transmittance of 20.

The turbidity values reported have not been corrected for the small positive bias which may have been introduced by the presence of true color in some of the water samples. Numerous analysts produced the turbidity data contained in this report and it is obvious that some of them deviated from the prescribed methods, perhaps by not adequately dispersing the settled materials or by using 1/2-inch test tubes instead of 1-inch test tubes. In general, most of the questionable data appear to be too low. The most obviously defective turbidity data were deleted. Unreasonably high turbidity values were systematically deleted when field notes indicated that the water had been clear when sampled but the orange and yellow precipitates of iron compounds had formed before analysis.

SECTION 3

RESULTS

A tabulation of sites by site number, county, date of surface mining, latitude, longitude, surface drainage area, percentage of land disturbed by surface mining, and site name is given in Table 1. Site locations and watershed boundaries were drawn on U. S. Geological Survey 7 1/2 minute topographic maps which are reproduced in Figures 2 through 74. Field observations and analytical data are tabulated in Tables 4 through 127. An interpretive report, to be released later, will cover all nine states in the Appalachian study area.

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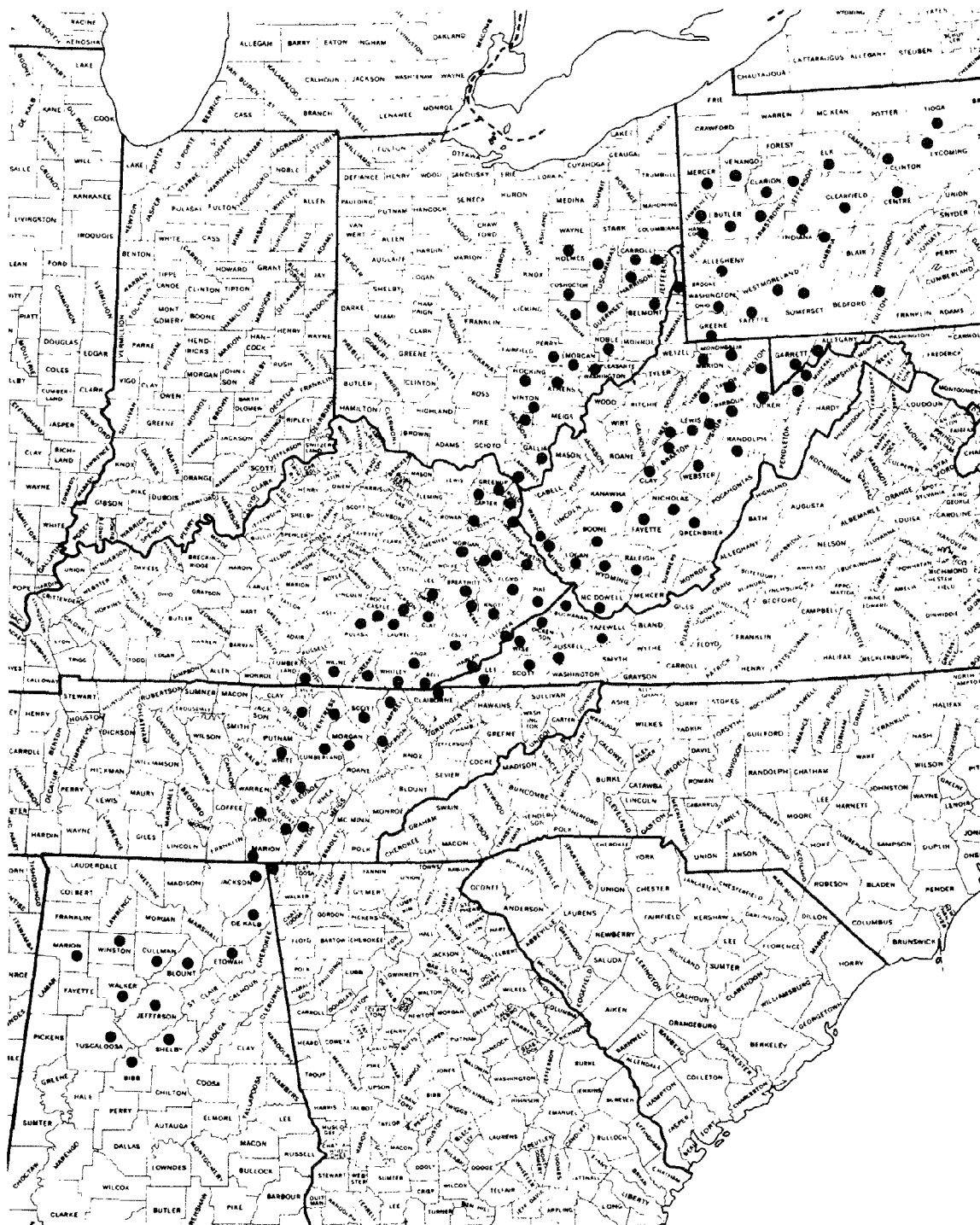


Figure 1. The study area. (Each dot marks one of the 136 Appalachian counties included in this study)

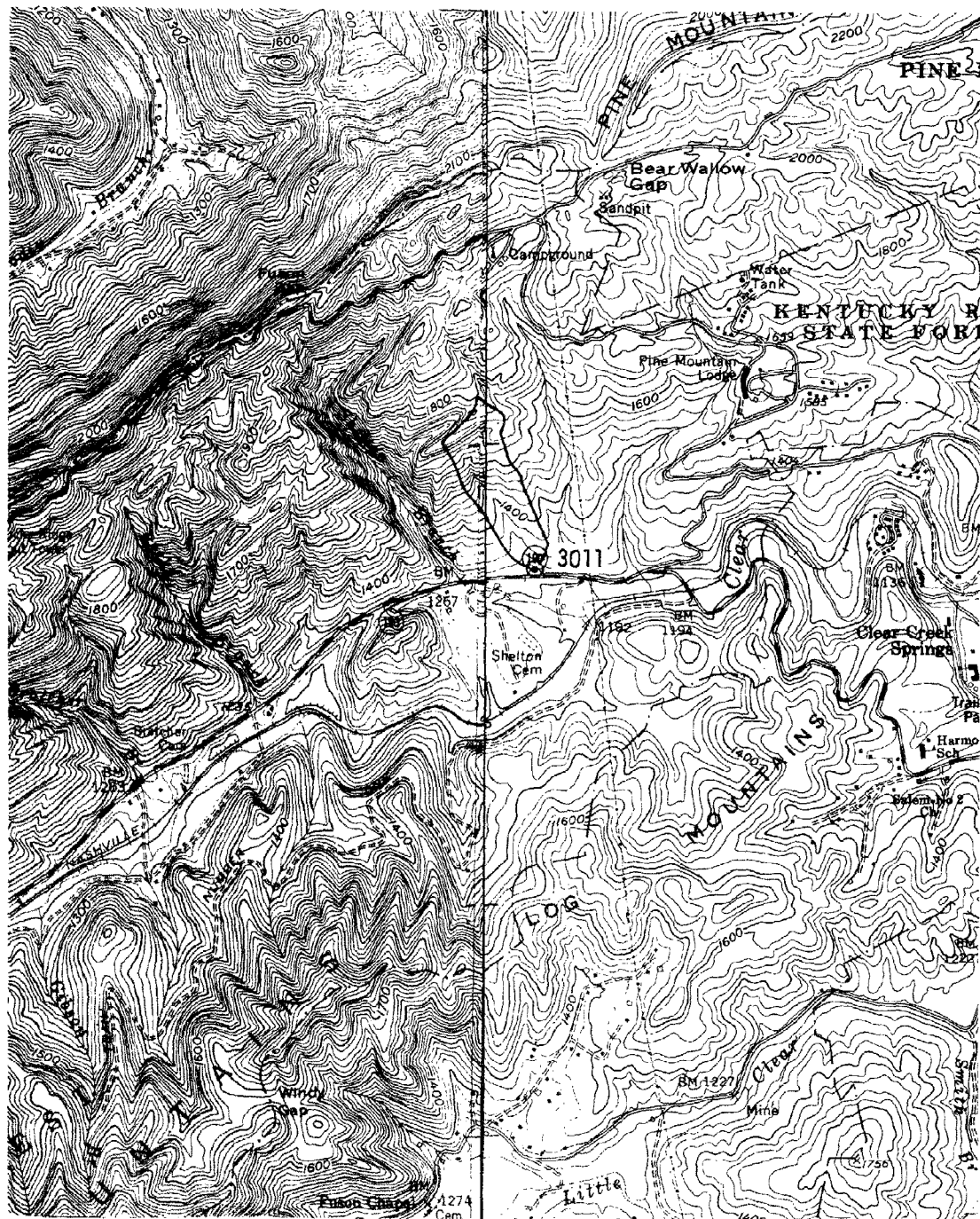


Figure 2. Location map for site 3011, Bell Co., Kentucky. Middlesboro North and Kay Jay Quadrangles.

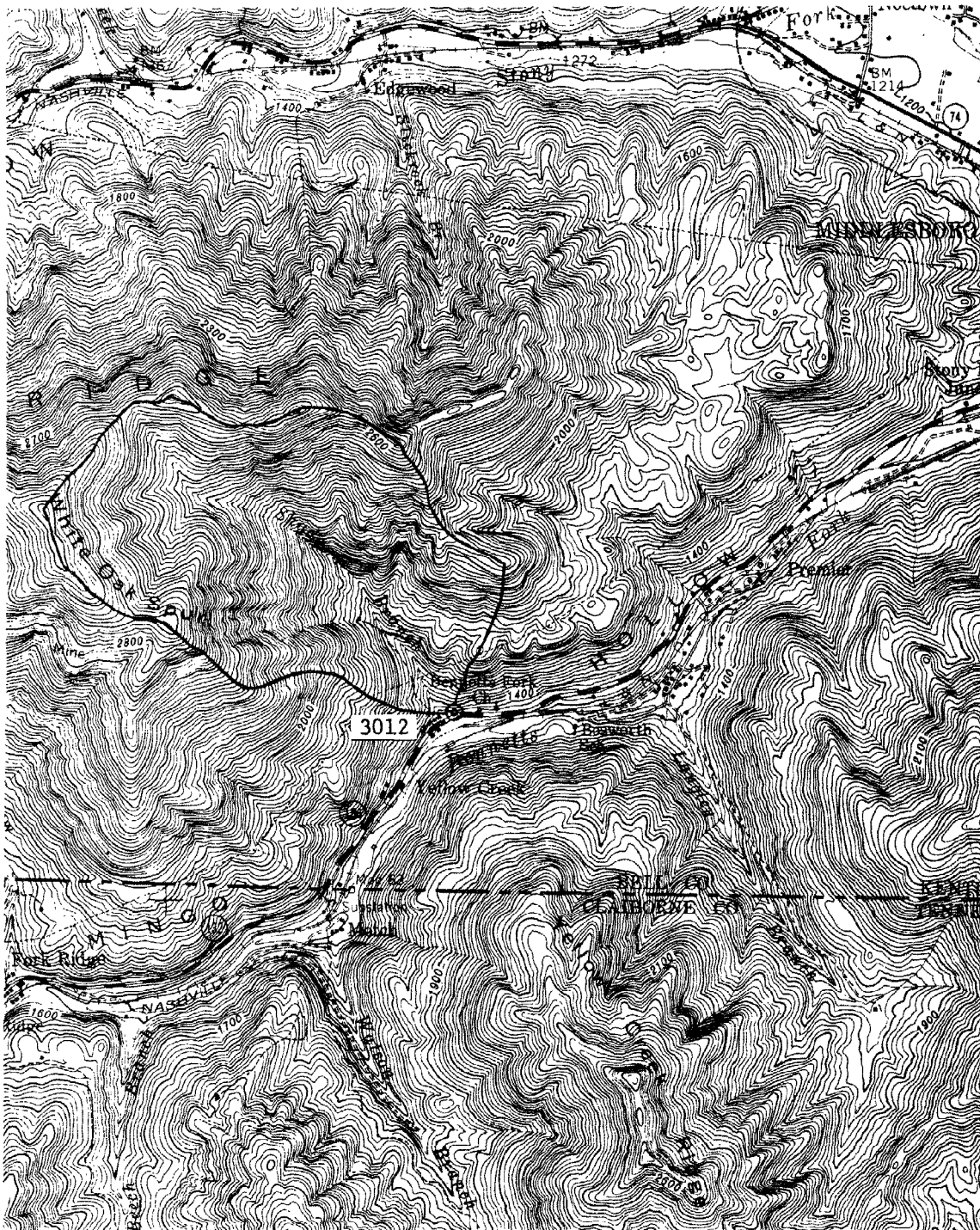


Figure 3. Location map for site 3012. Bell Co., Kentucky. Fork Ridge Quadrangle.

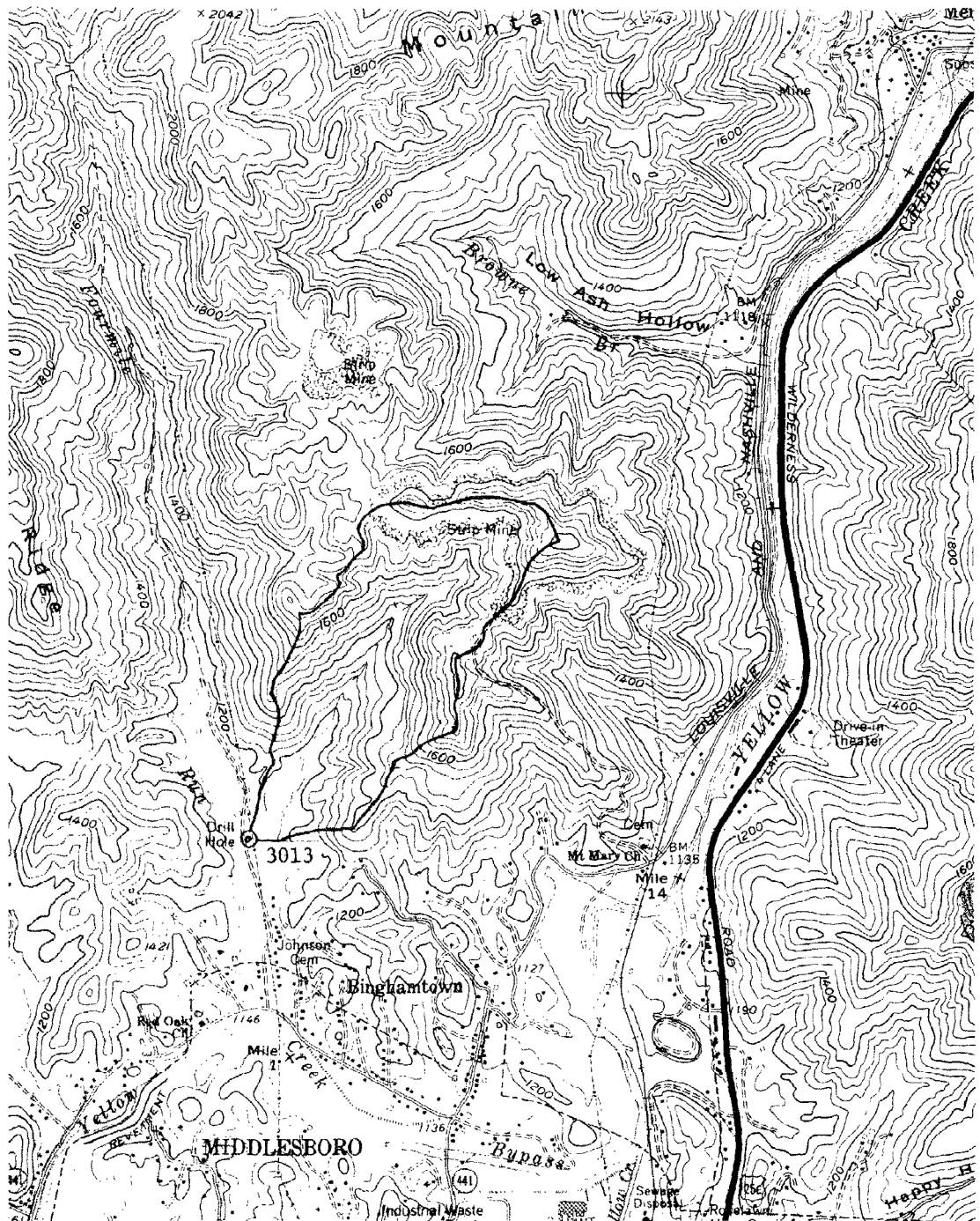


Figure 4. Location map for site 3013. Bell Co., Kentucky. Middlesboro North Quadrangle.

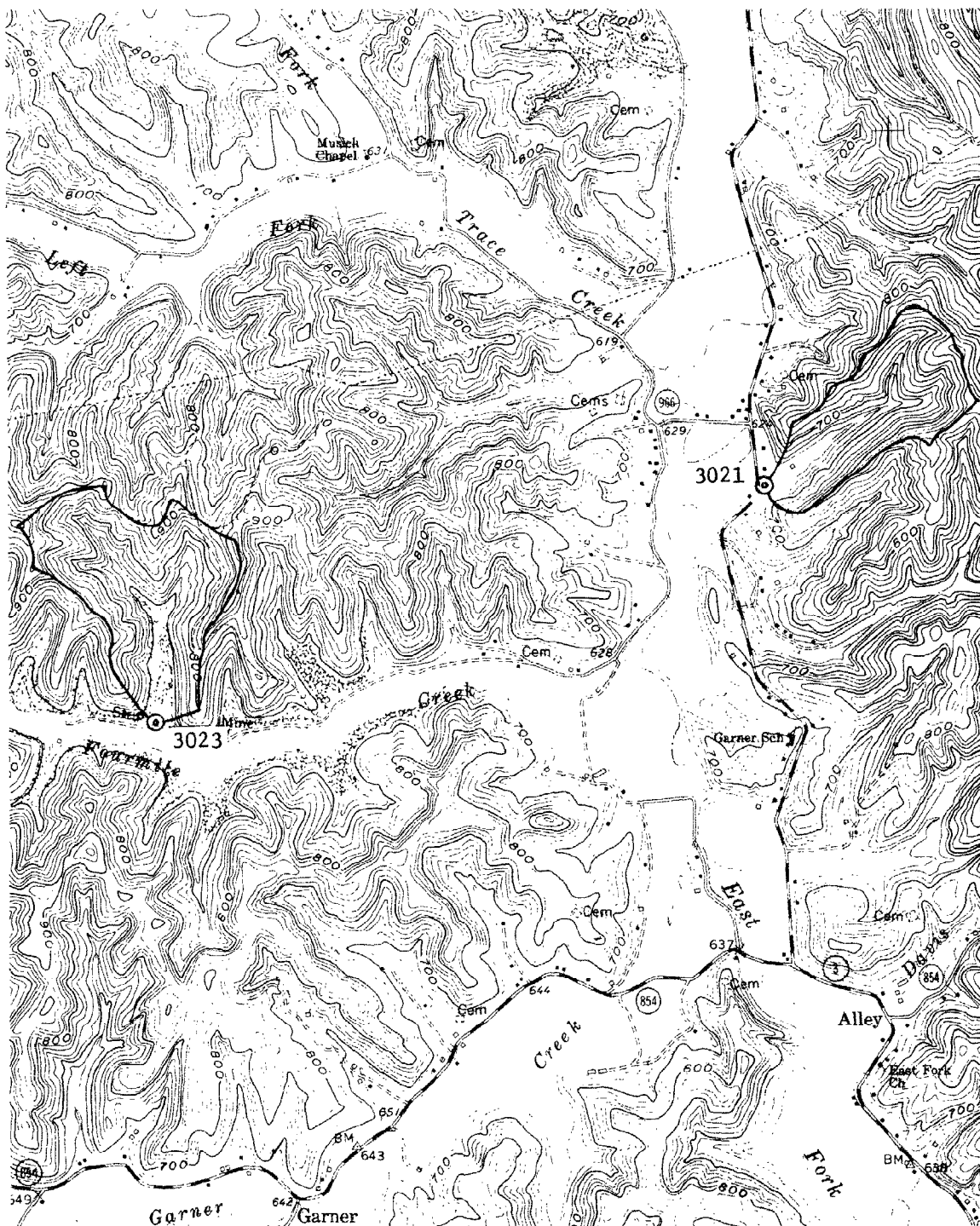


Figure 5. Location map for sites 3021 and 3023, Boyd Co., Kentucky.
Boltsfork Quadrangle.

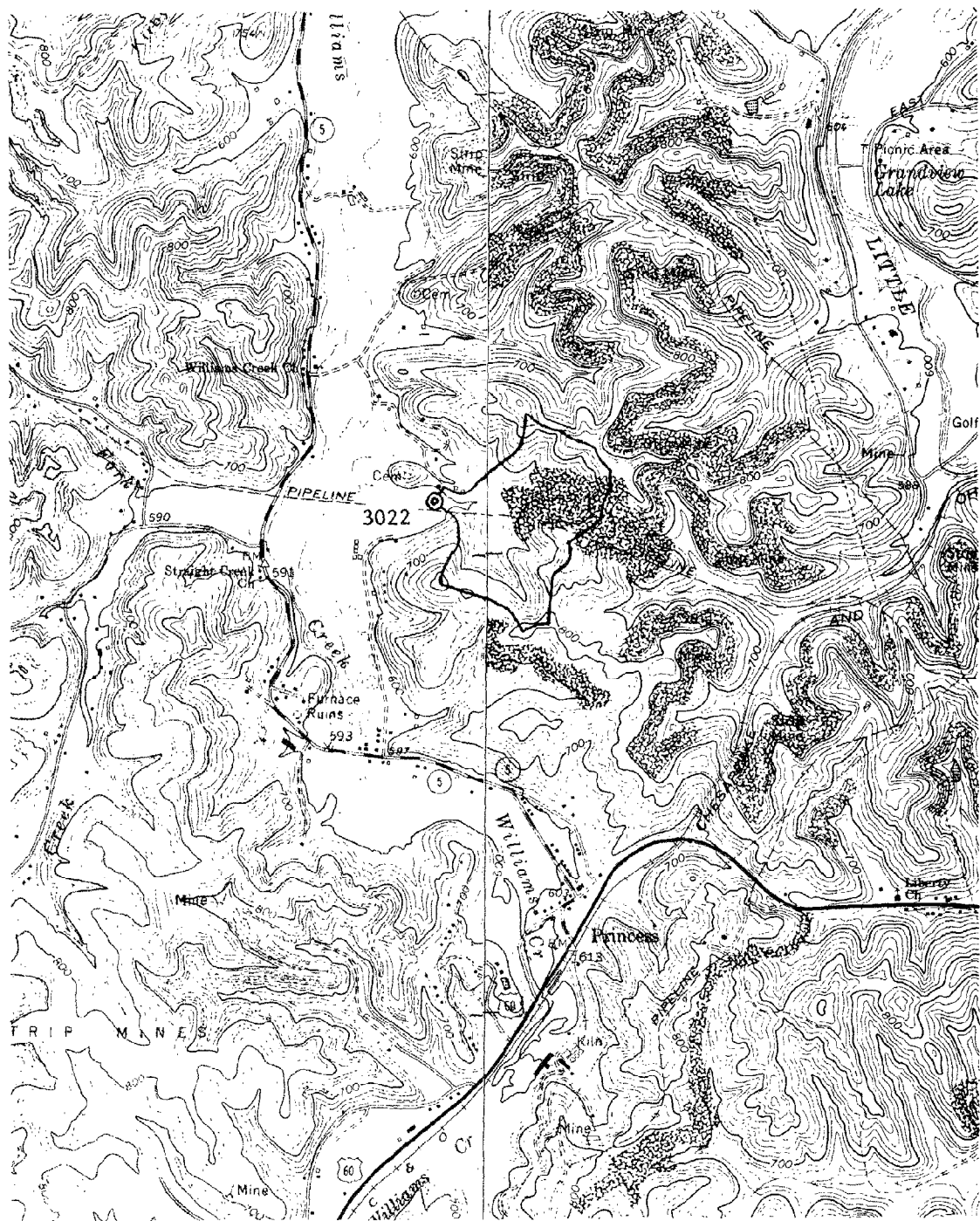


Figure 6. Location map for site 3022, Boyd Co., Kentucky. Argillite and Ashland Quadrangles.

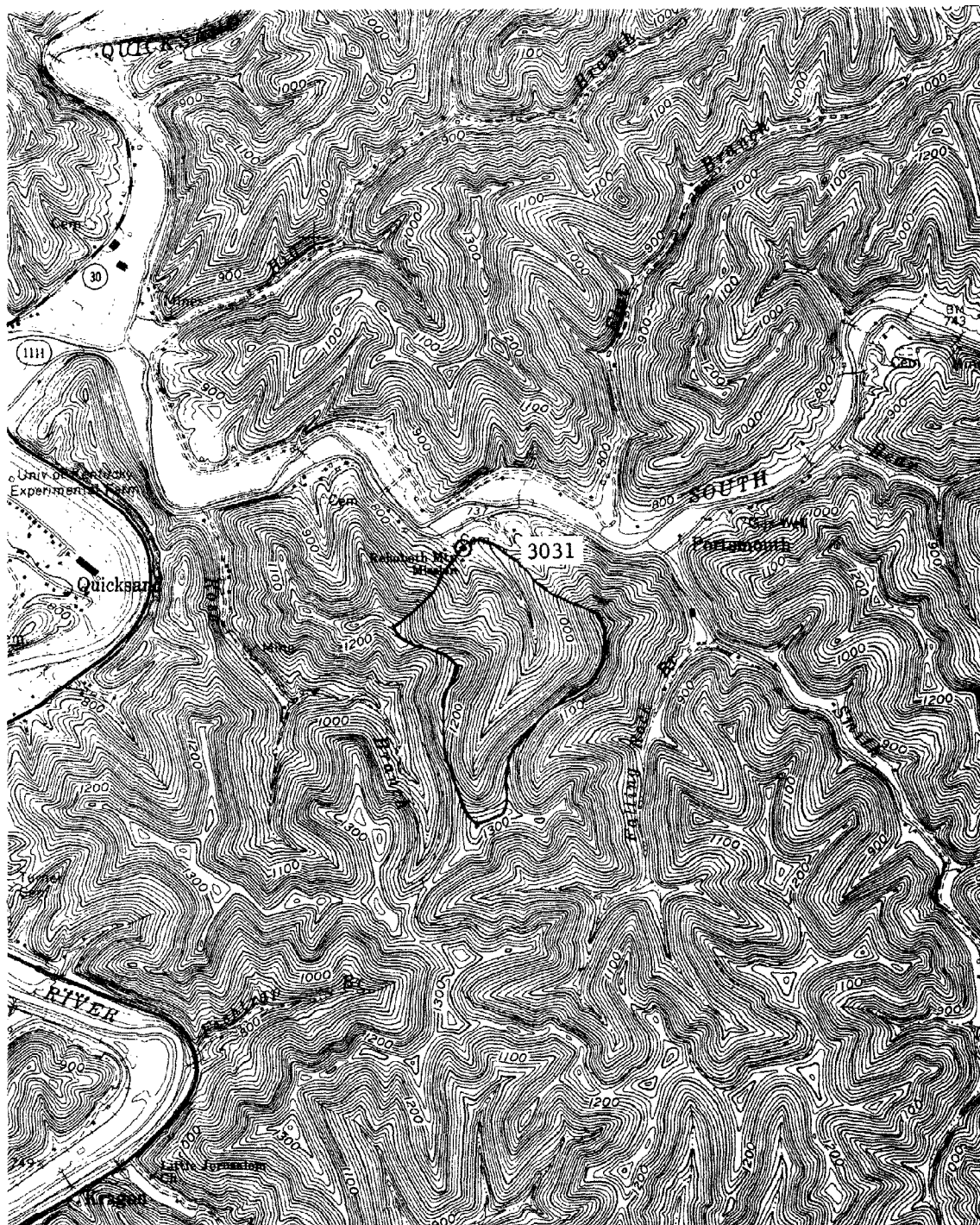


Figure 7. Location map for site 3031, Breathitt Co., Kentucky. Quicksand Quadrangle.



Figure 8. Location map for sites 3032 and 3036, Breathitt Co., Kentucky. Guage Quadrangle.

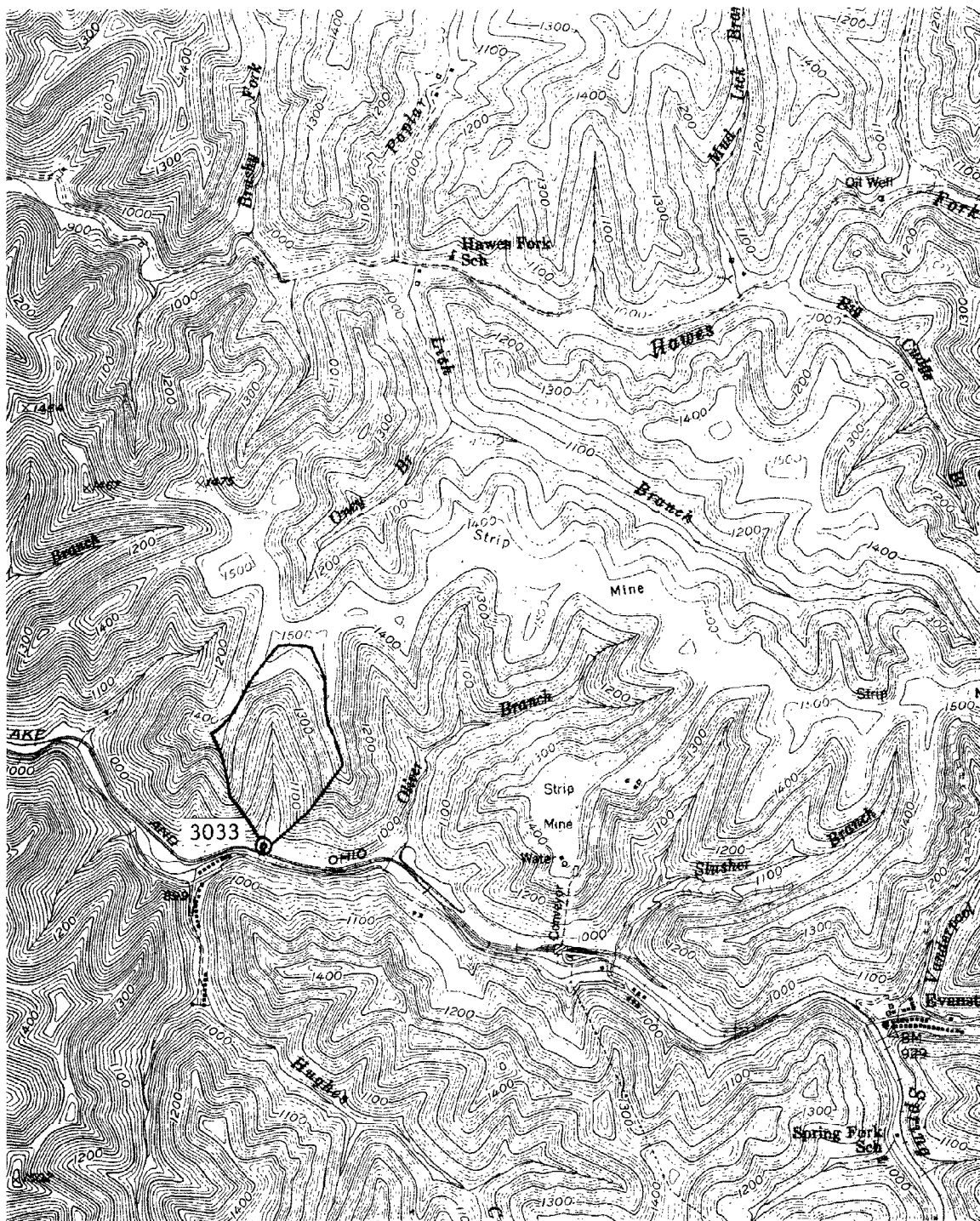


Figure 9. Location map for site 3033, Breathitt Co., Kentucky. Tiptop Quadrangle.

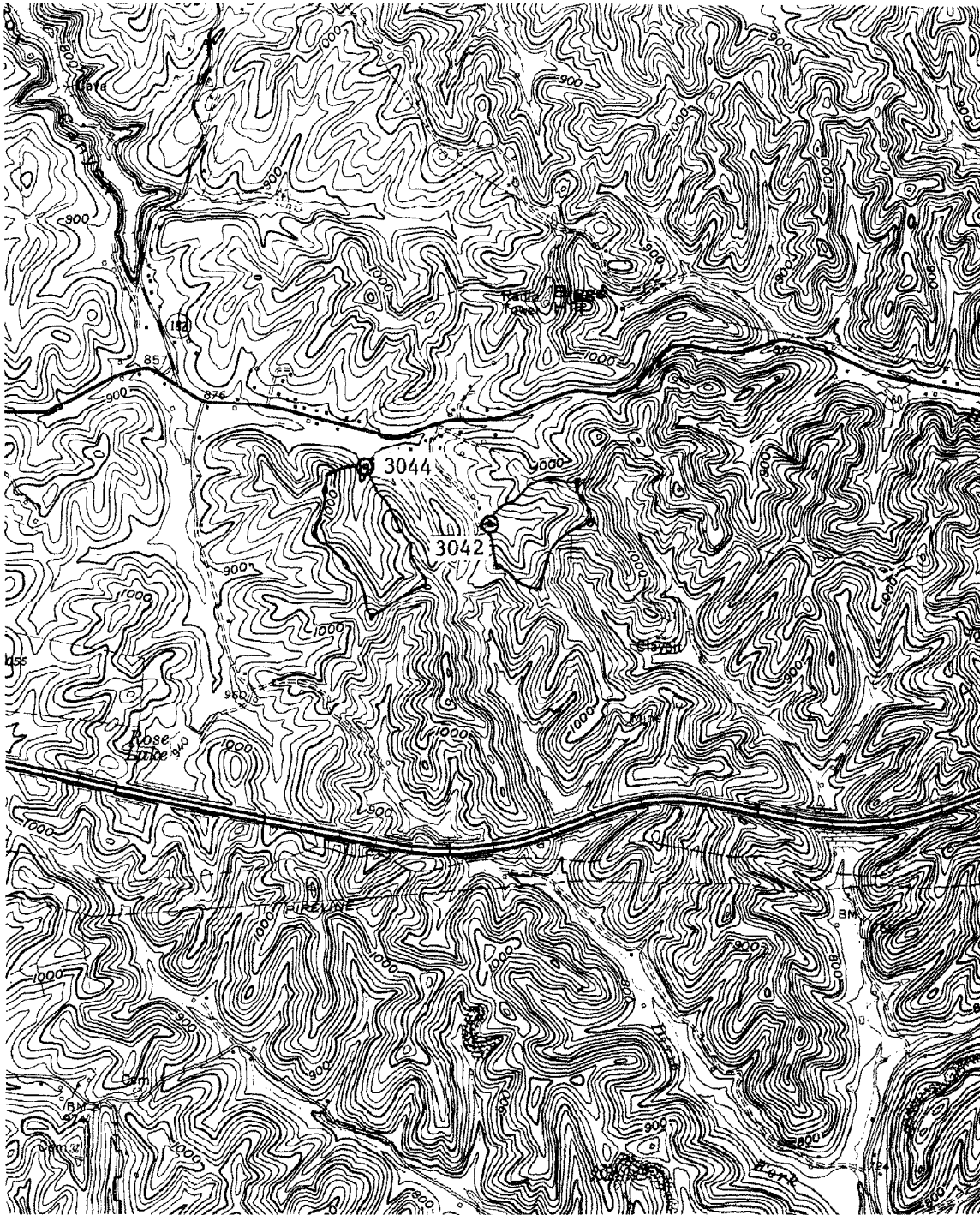


Figure 11. Location map for sites 3042 and 3044, Carter Co., Kentucky.
Grahn Quadrangle.

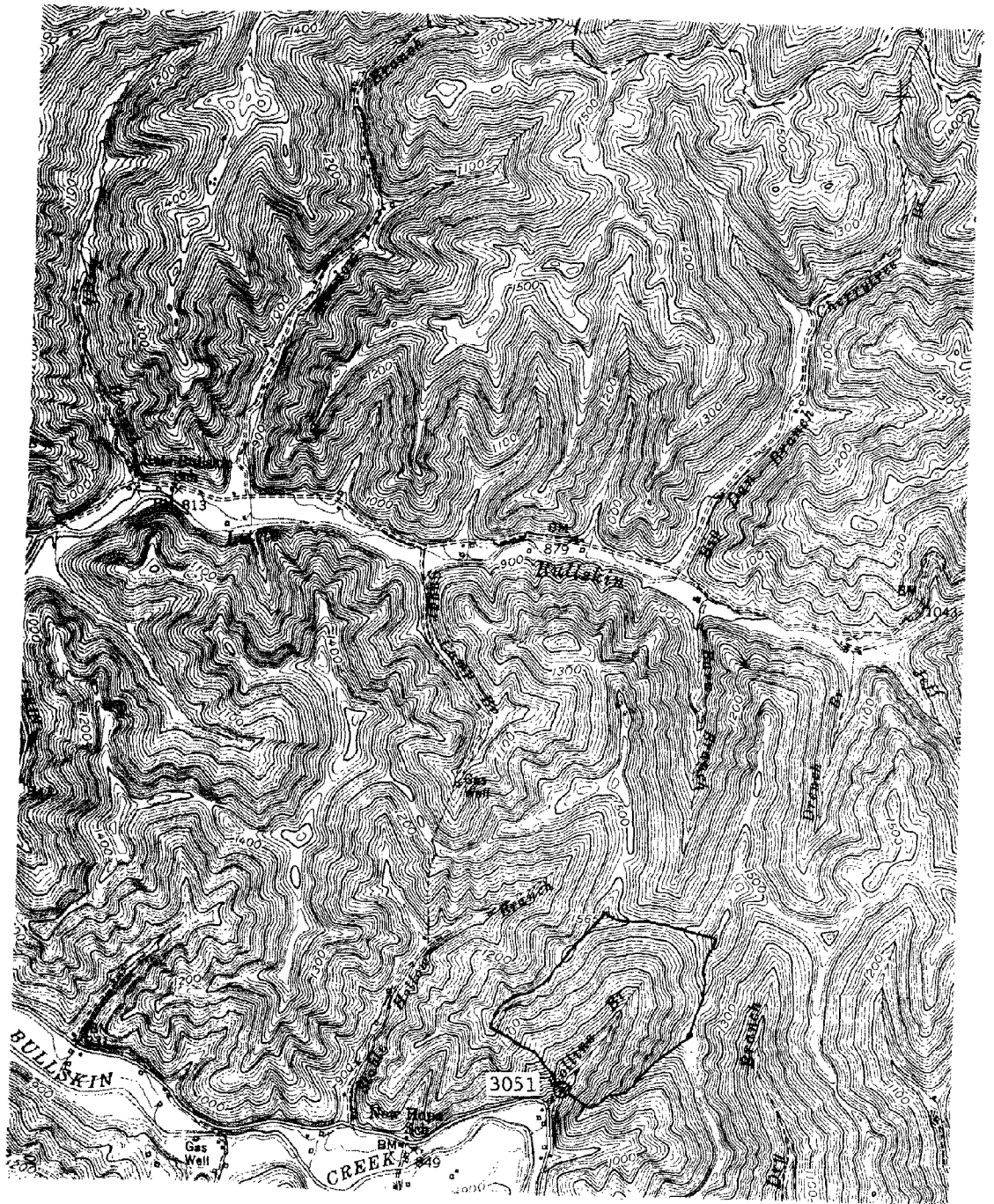


Figure 12. Location map for site 3051, Clay Co., Kentucky. Mistletoe Quadrangle.

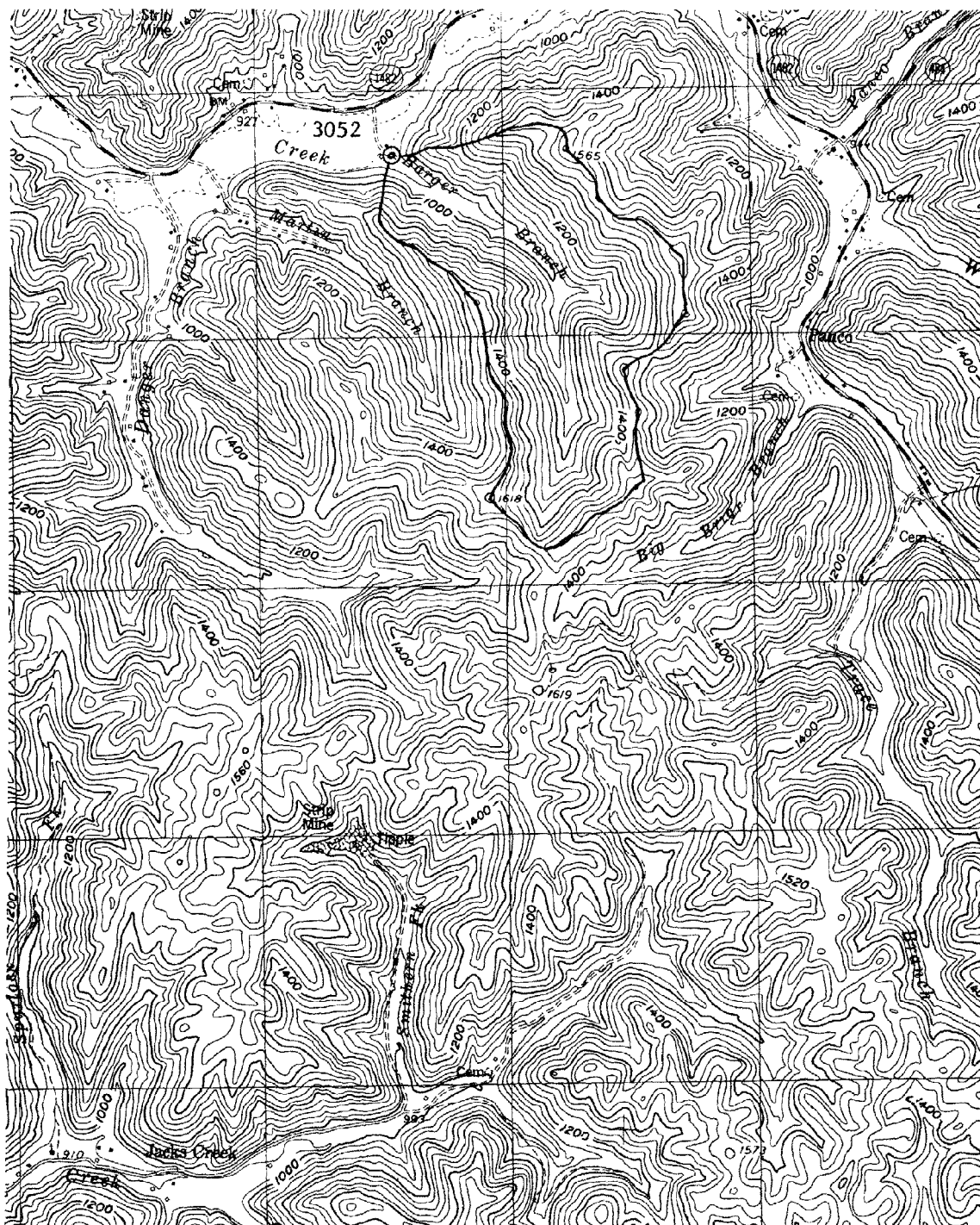


Figure 13. Location map for site 3052, Clay Co., Kentucky. Big Creek Quadrangle.

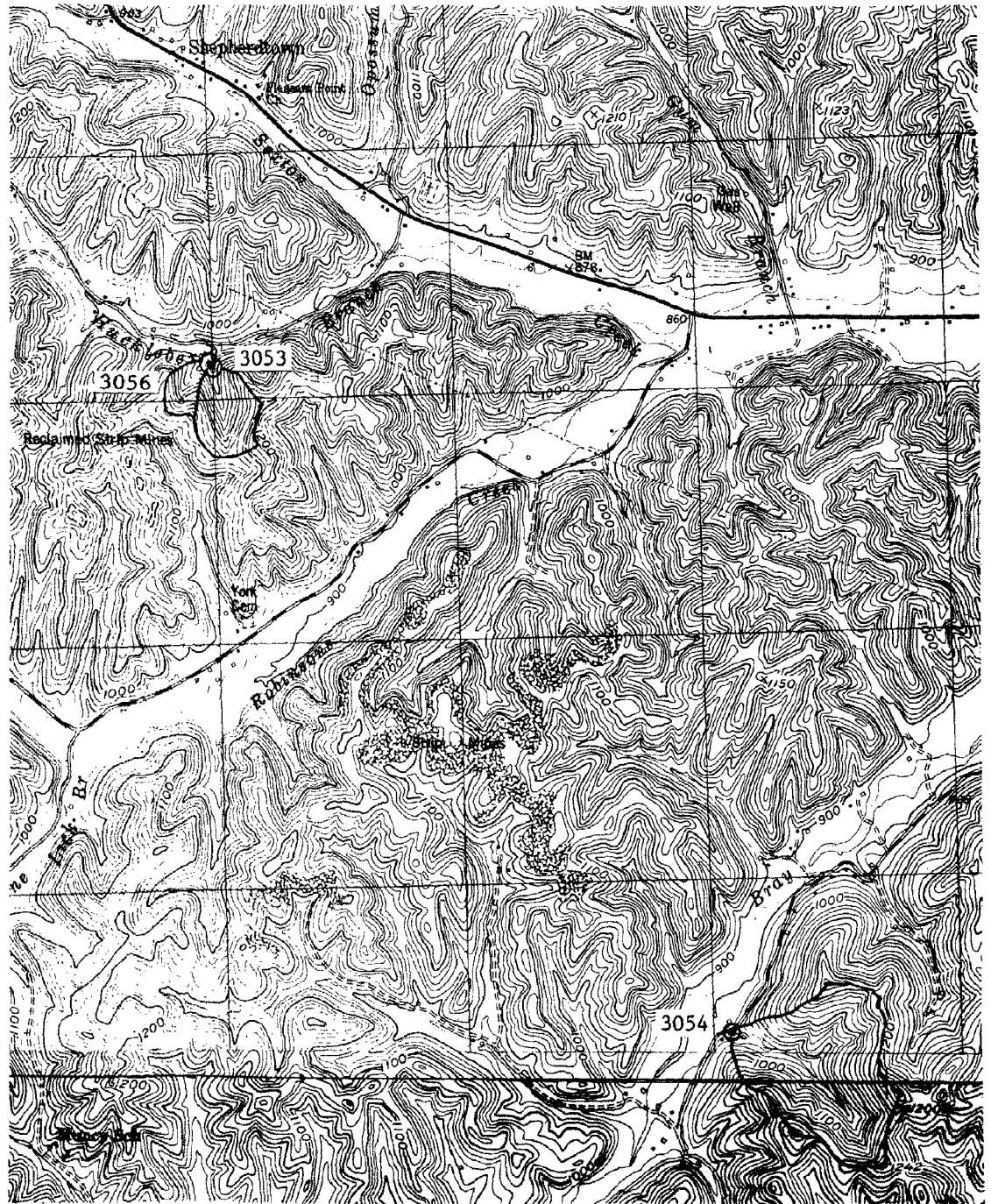


Figure 14. Location map for sites 3053, 3054, and 3056, Clay Co., Kentucky. Maulden and Manchester Quadrangles.

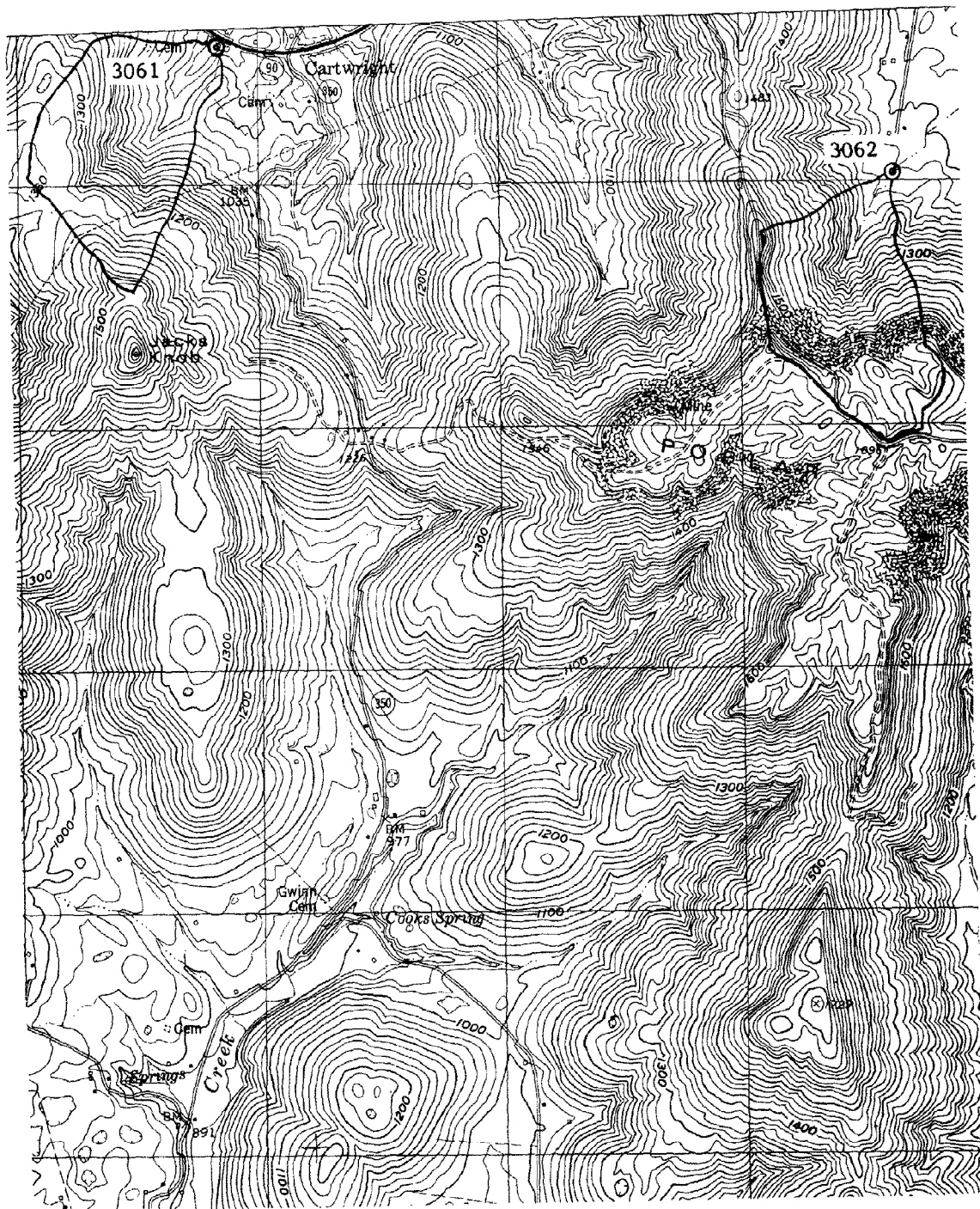


Figure 15. Location map for sites 3061 and 3062, Clinton Co., Kentucky.
Savage Quadrangle.

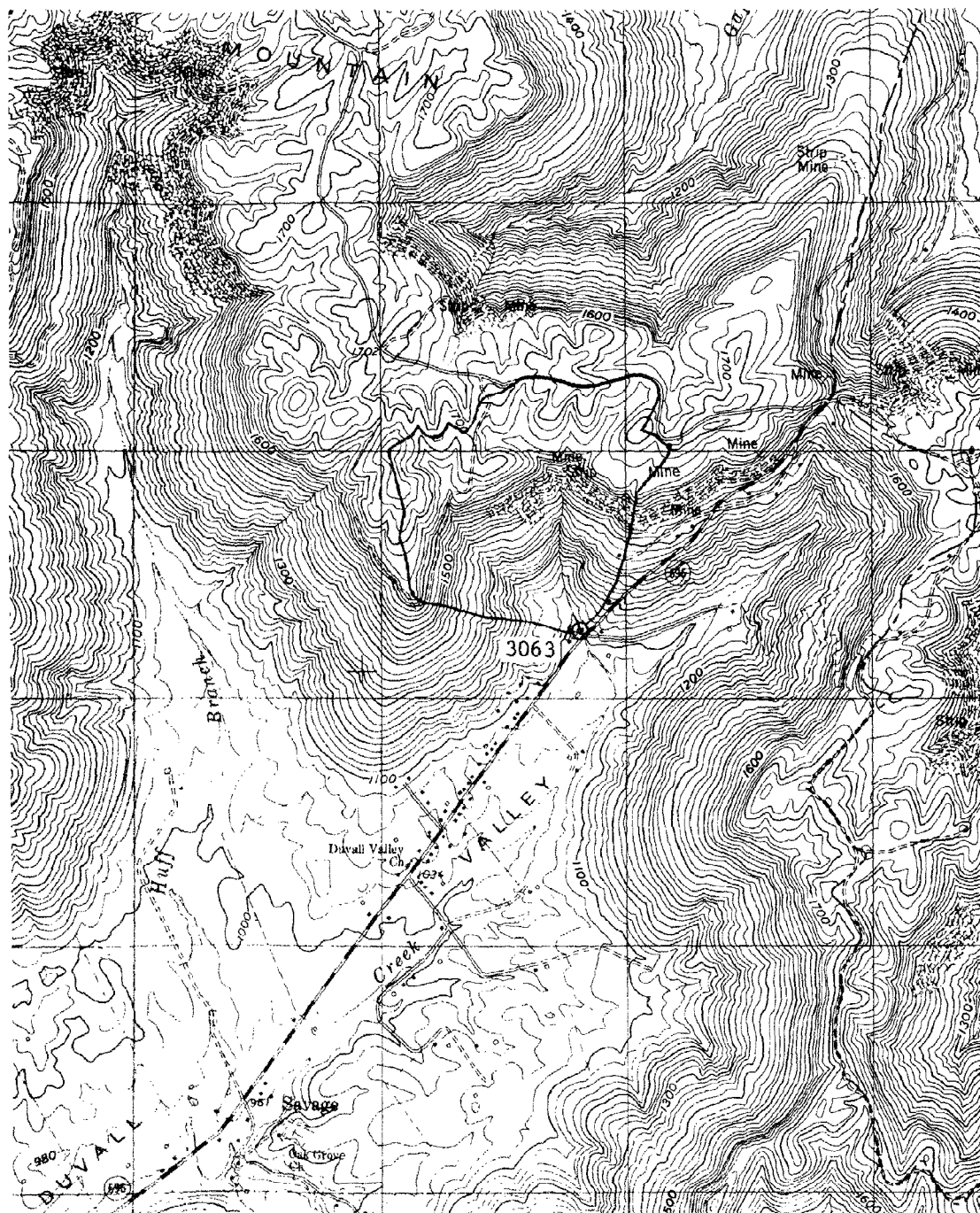


Figure 16. Location map for site 3063, Clinton Co., Kentucky. Savage Quadrangle.

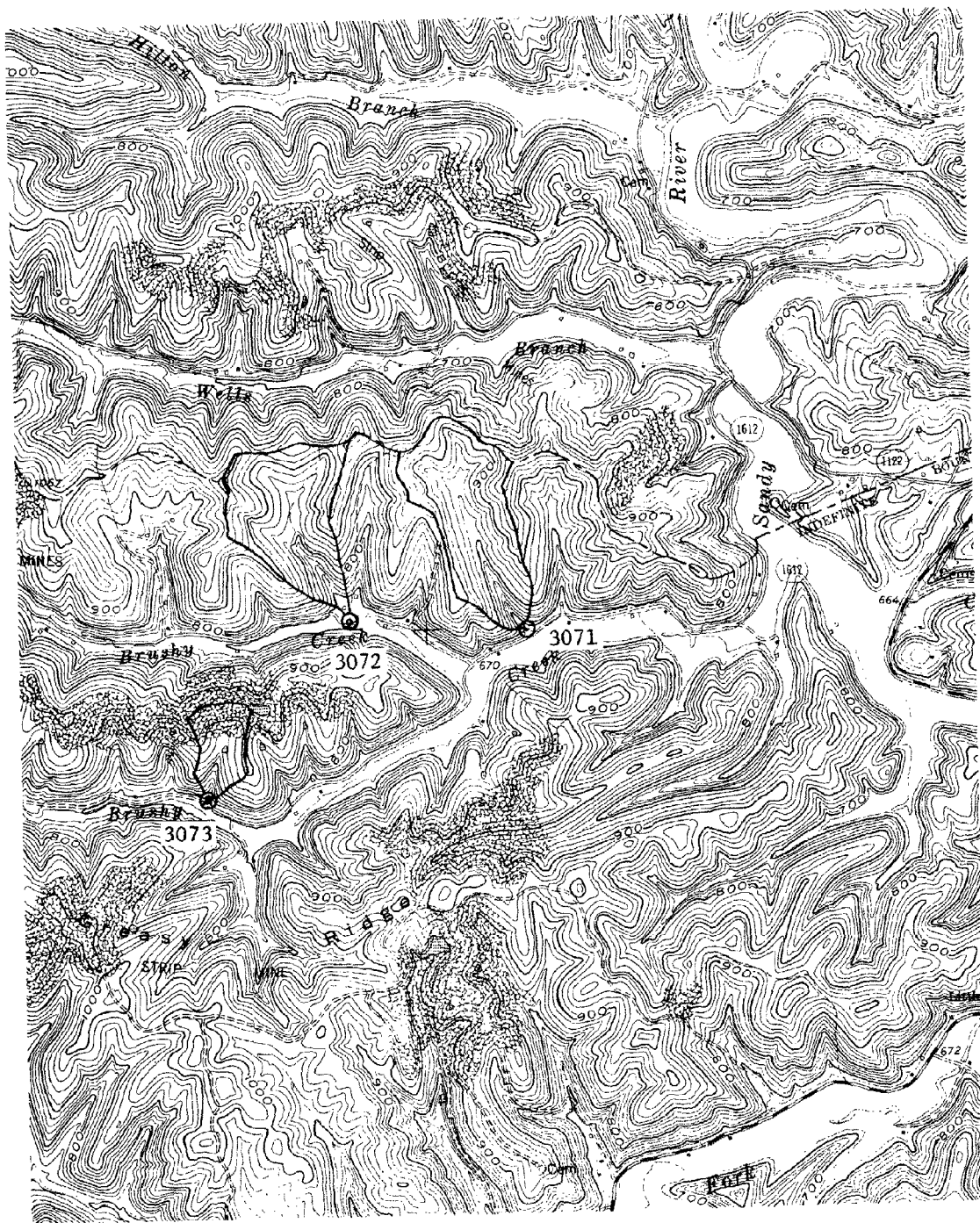


Figure 17. Location map for sites 3071, 3072, and 3073, Elliott Co., Kentucky. Willard Quadrangle.

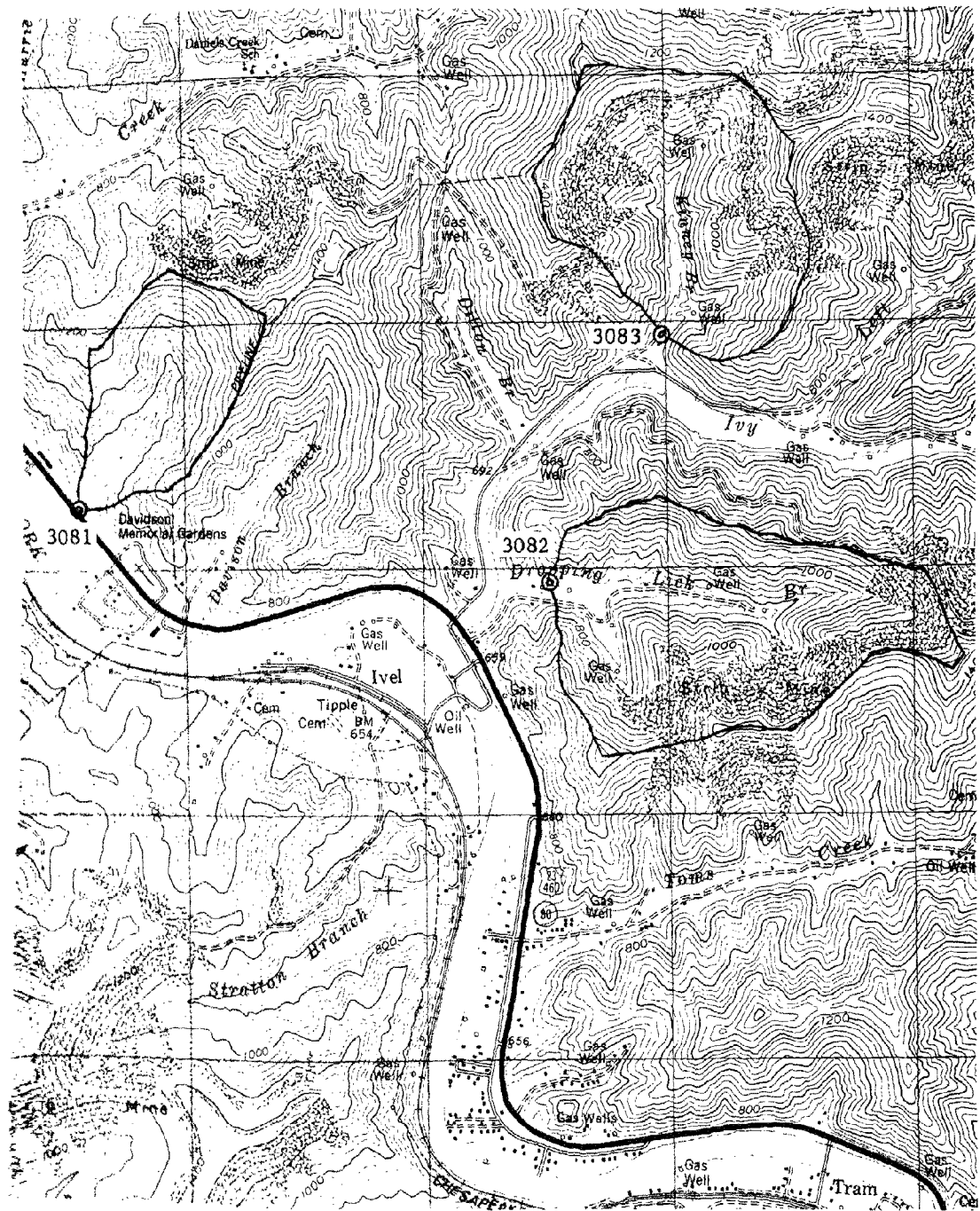


Figure 18. Location map for sites 3081, 3082, and 3083, Floyd Co., Kentucky. Harold Quadrangle.



Figure 19. Location map for sites 3090, 3092, 3093, 3095, 3098, and 3099, Greenup Co., Kentucky. Argillite Quadrangle.

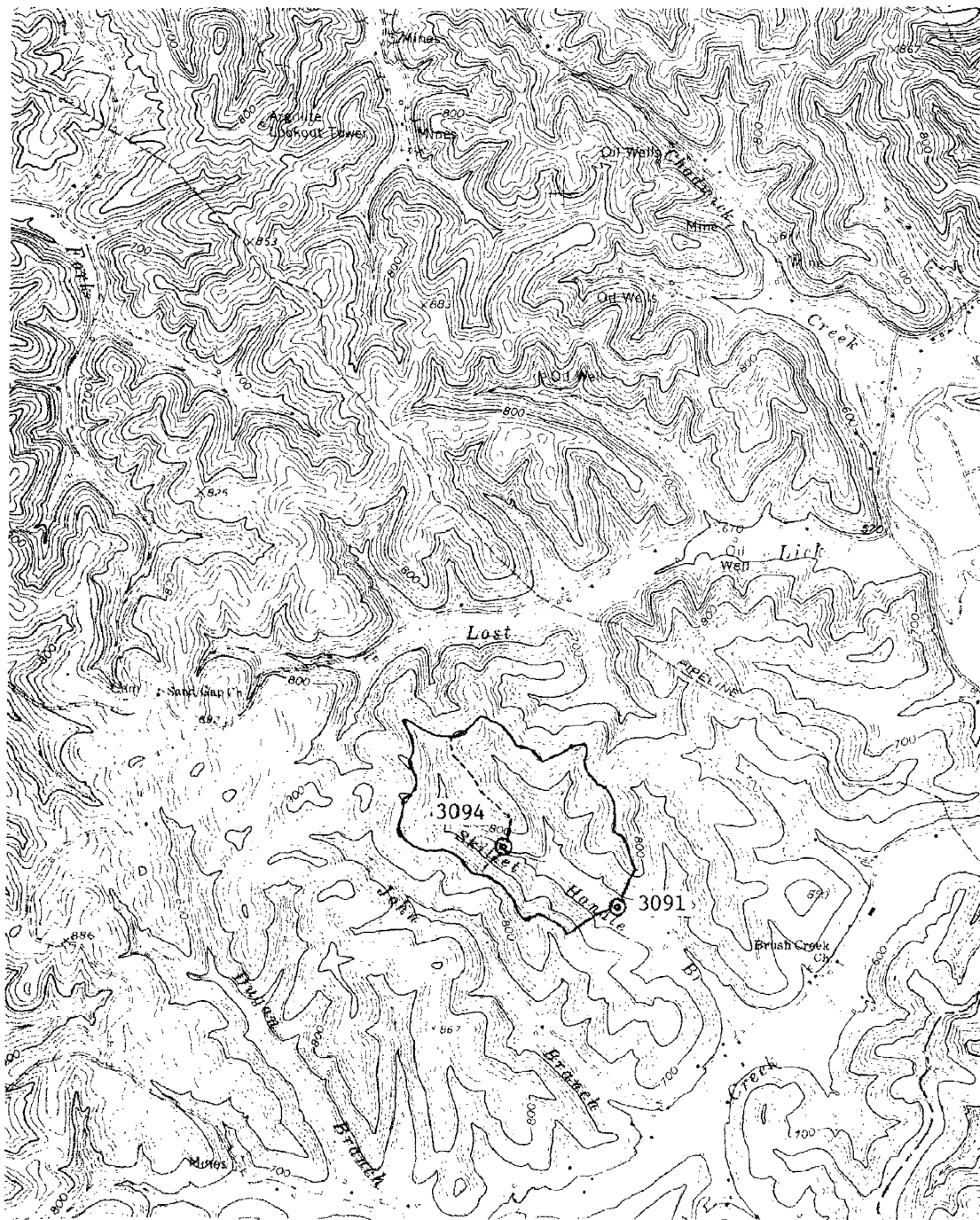


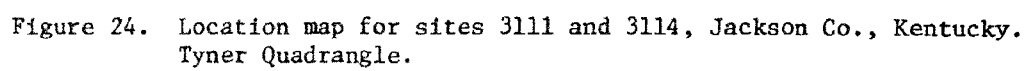
Figure 20. Location map for sites 3091 and 3094, Greenup Co., Kentucky. Argillite Quadrangle.



Figure 21. Location map for site 3101. Harlan Co., Kentucky. Hubbard Springs Quadrangle.



Figure 23. Location map for site 3103, Harlan Co., Kentucky. Rose Hill Quadrangle.



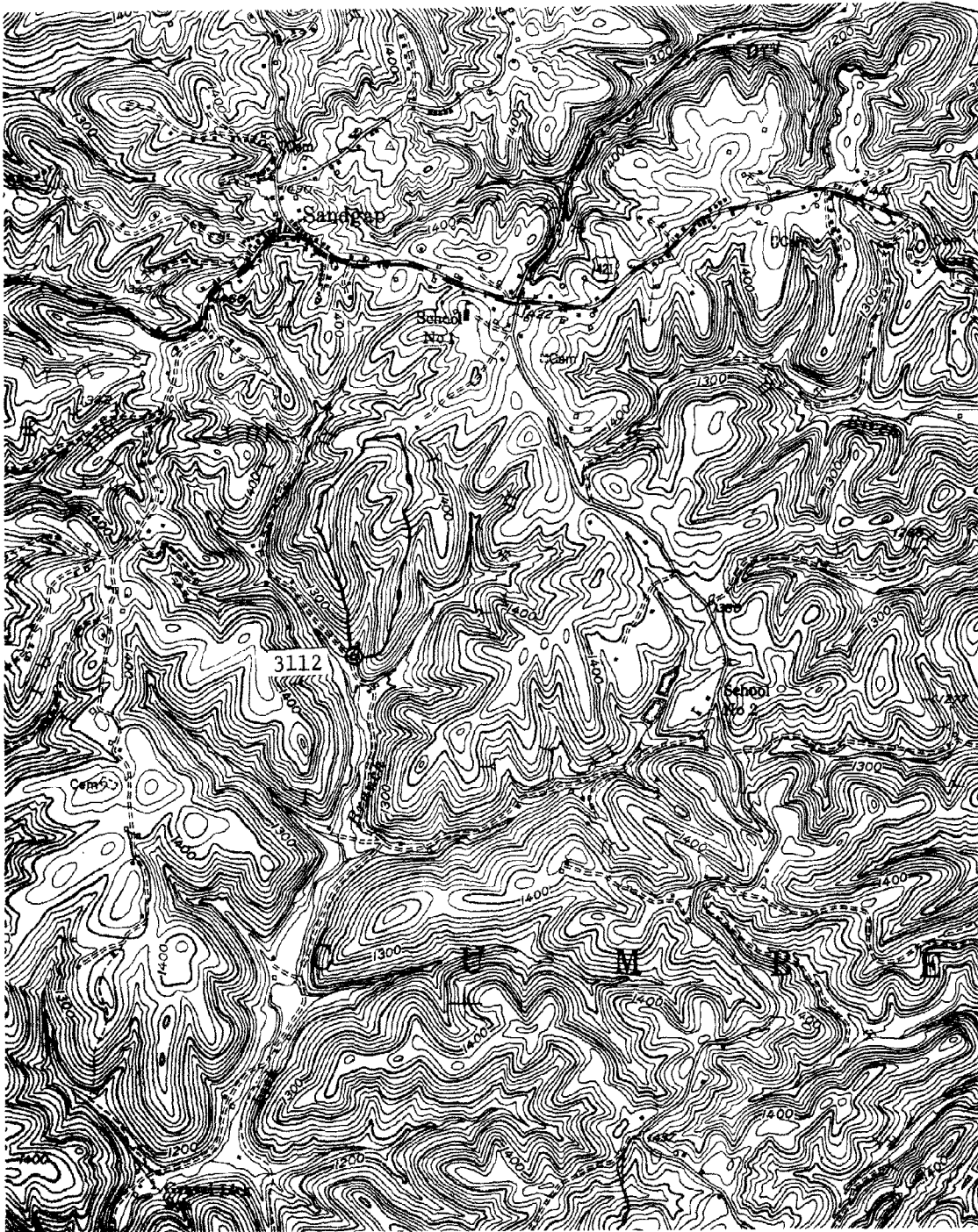


Figure 25. Location map for site.3112, Jackson Co., Kentucky. Sandgap Quadrangle.

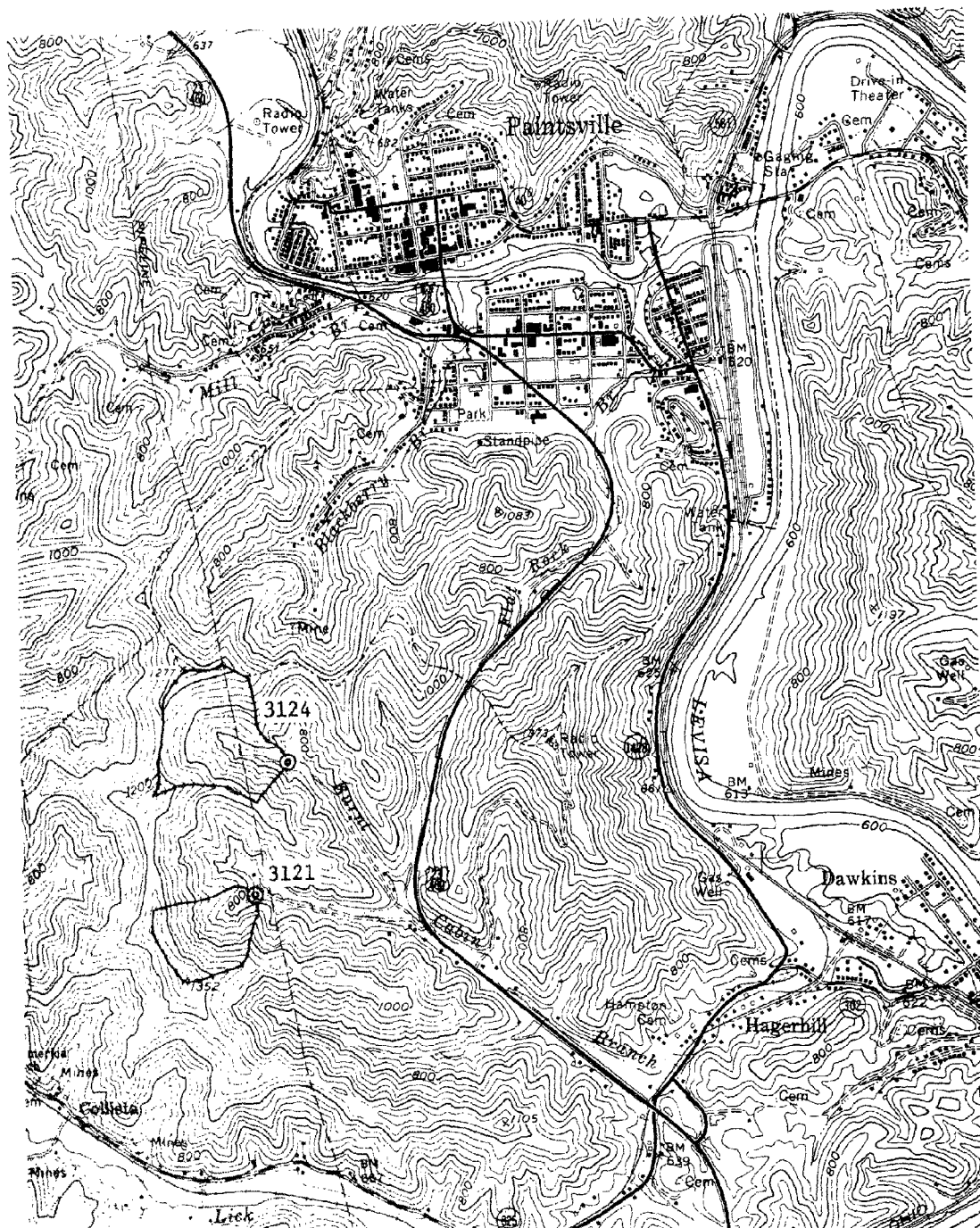


Figure 26. Location map for sites 3121 and 3124, Johnson Co., Kentucky. Paintsville Quadrangle.

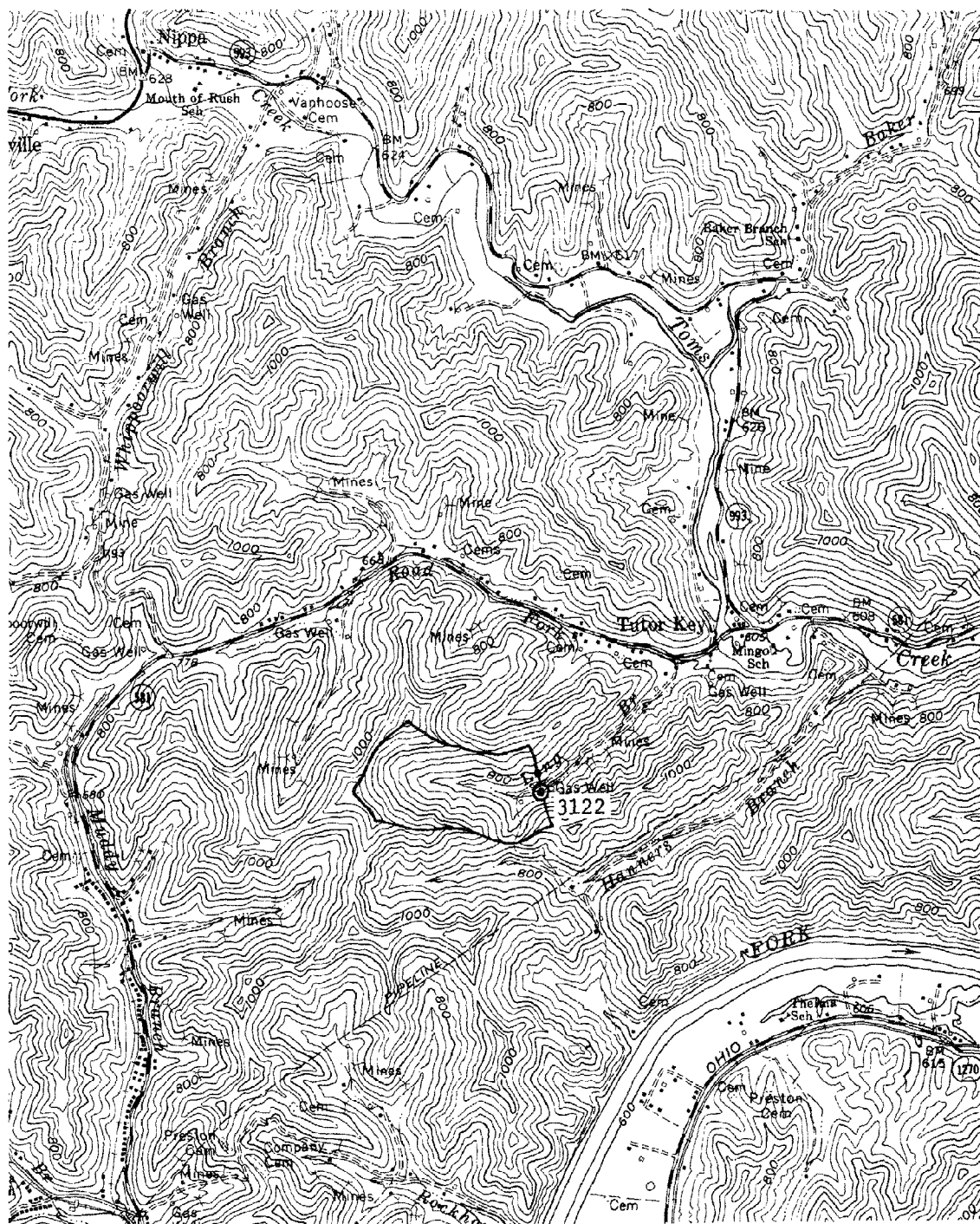


Figure 27. Location map for site 3122, Johnson Co., Kentucky. Paintsville Quadrangle.

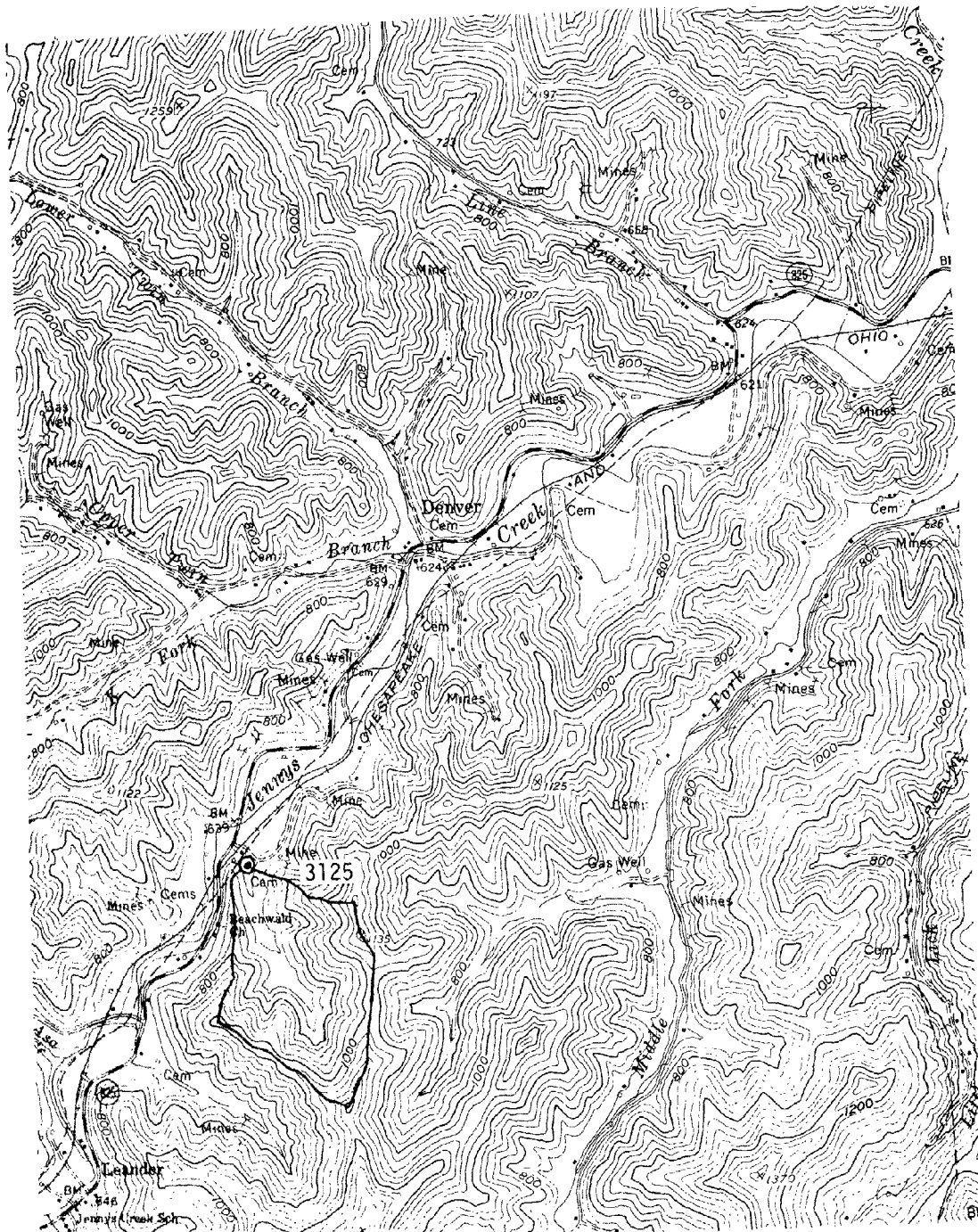


Figure 28. Location map for site 3125, Johnson Co., Kentucky. Paintsville Quadrangle.

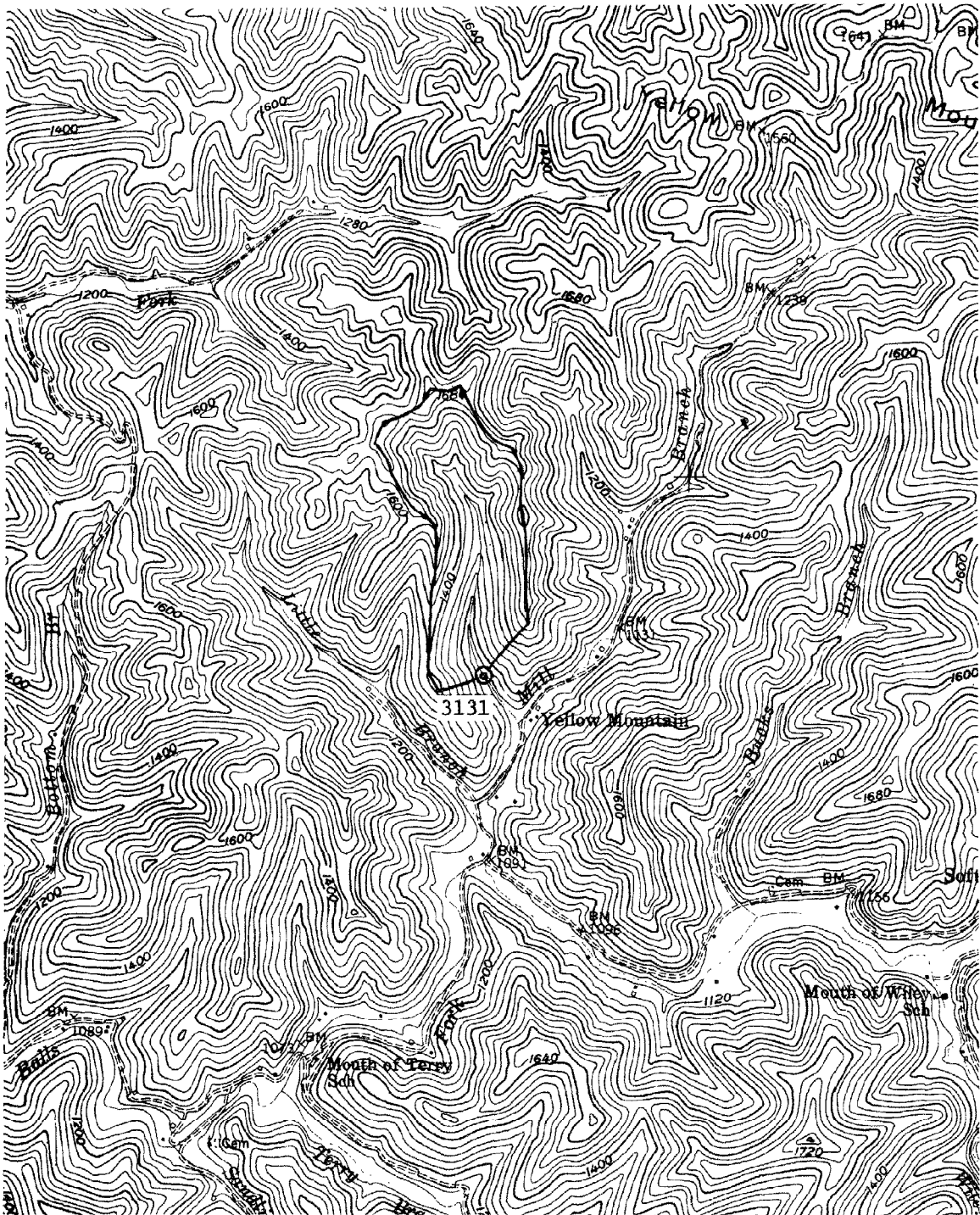


Figure 29. Location map for site 3131, Knott Co., Kentucky. Handshoe Quadrangle.

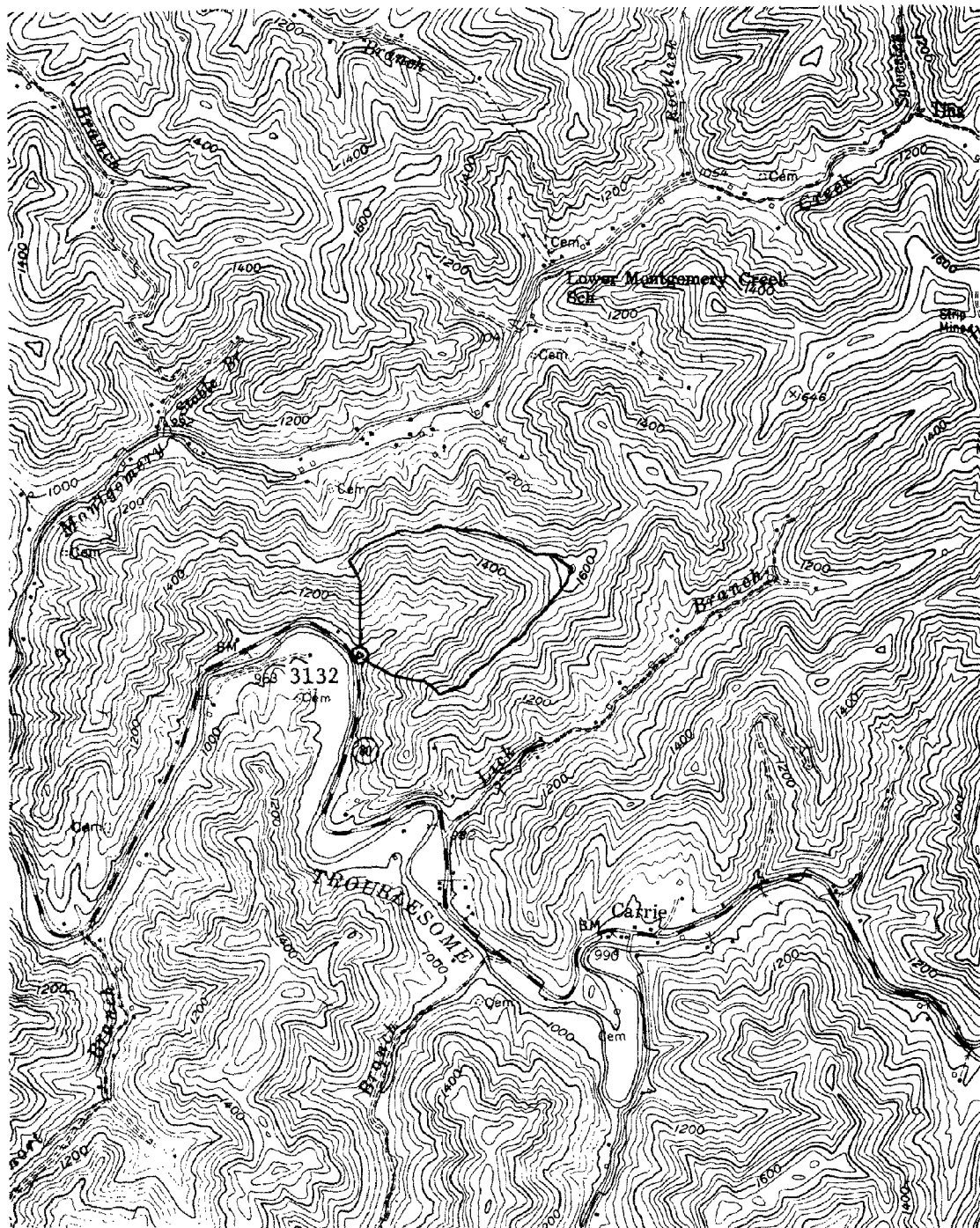


Figure 30. Location map for site 3132, Knott Co., Kentucky. Carrie Quadrangle.

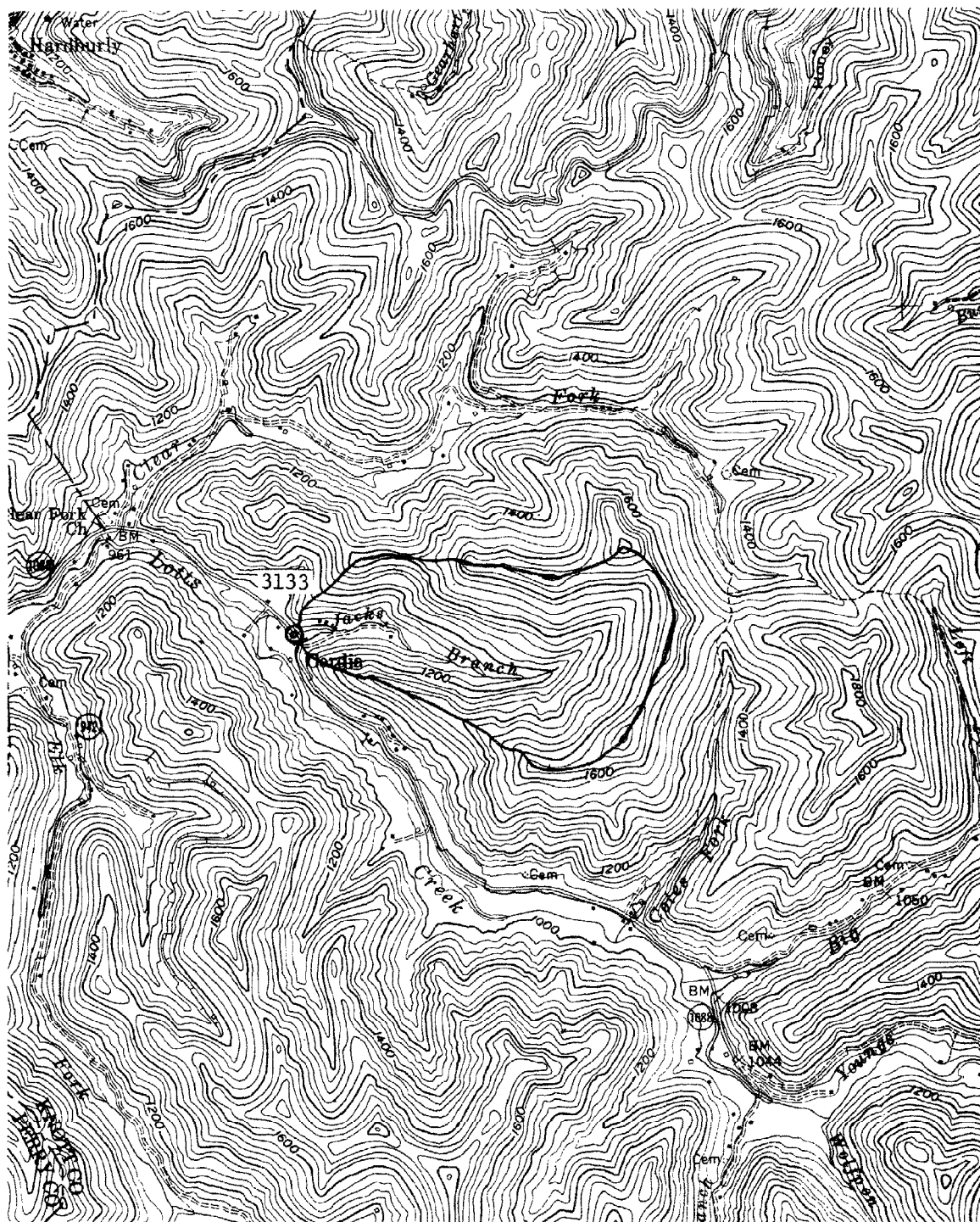


Figure 31. Location map for site 3133, Knott Co., Kentucky. Carrie Quadrangle.

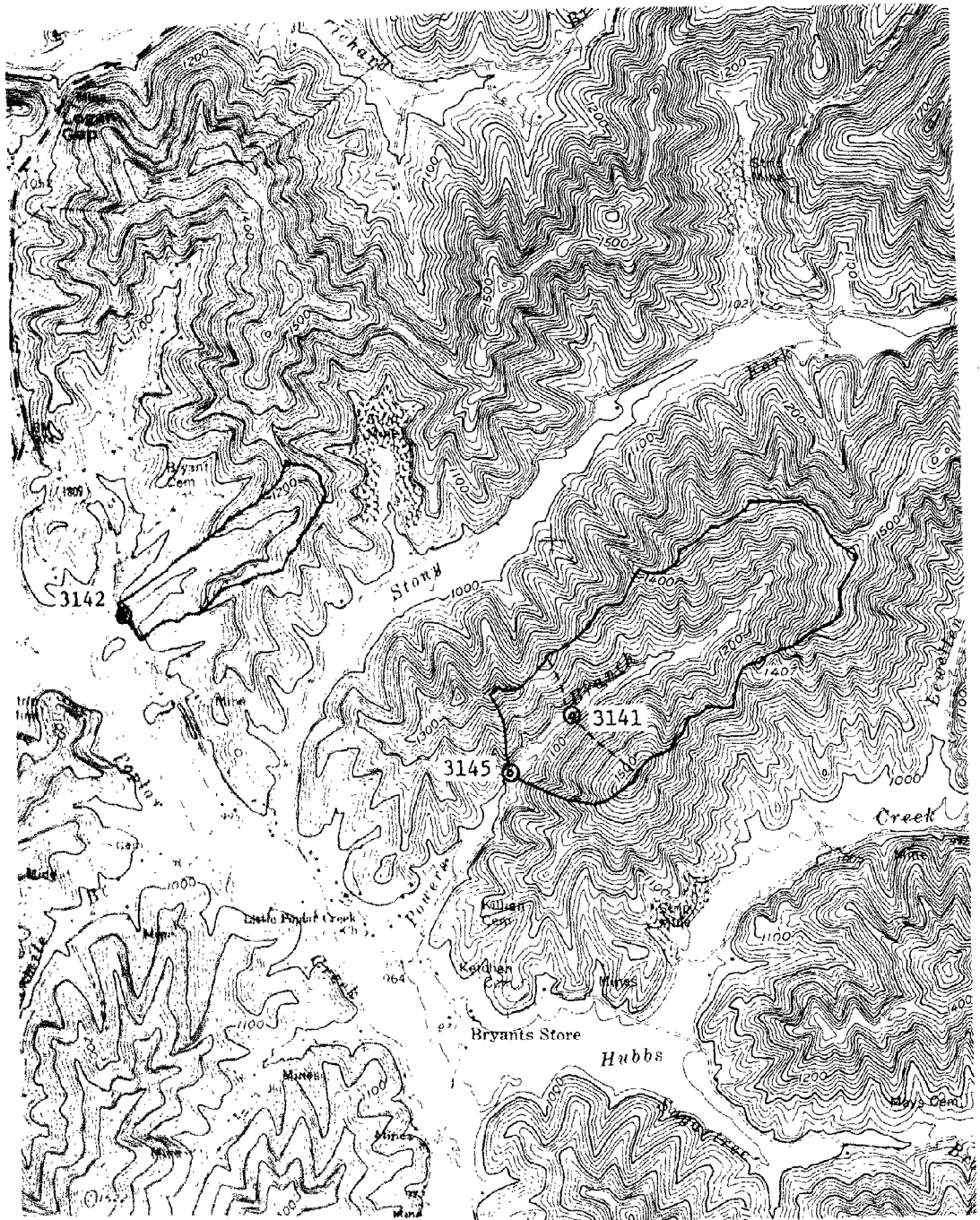


Figure 32. Location map for sites 3141, 3142, and 3145, Knox Co., Kentucky. Barbourville Quadrangle.

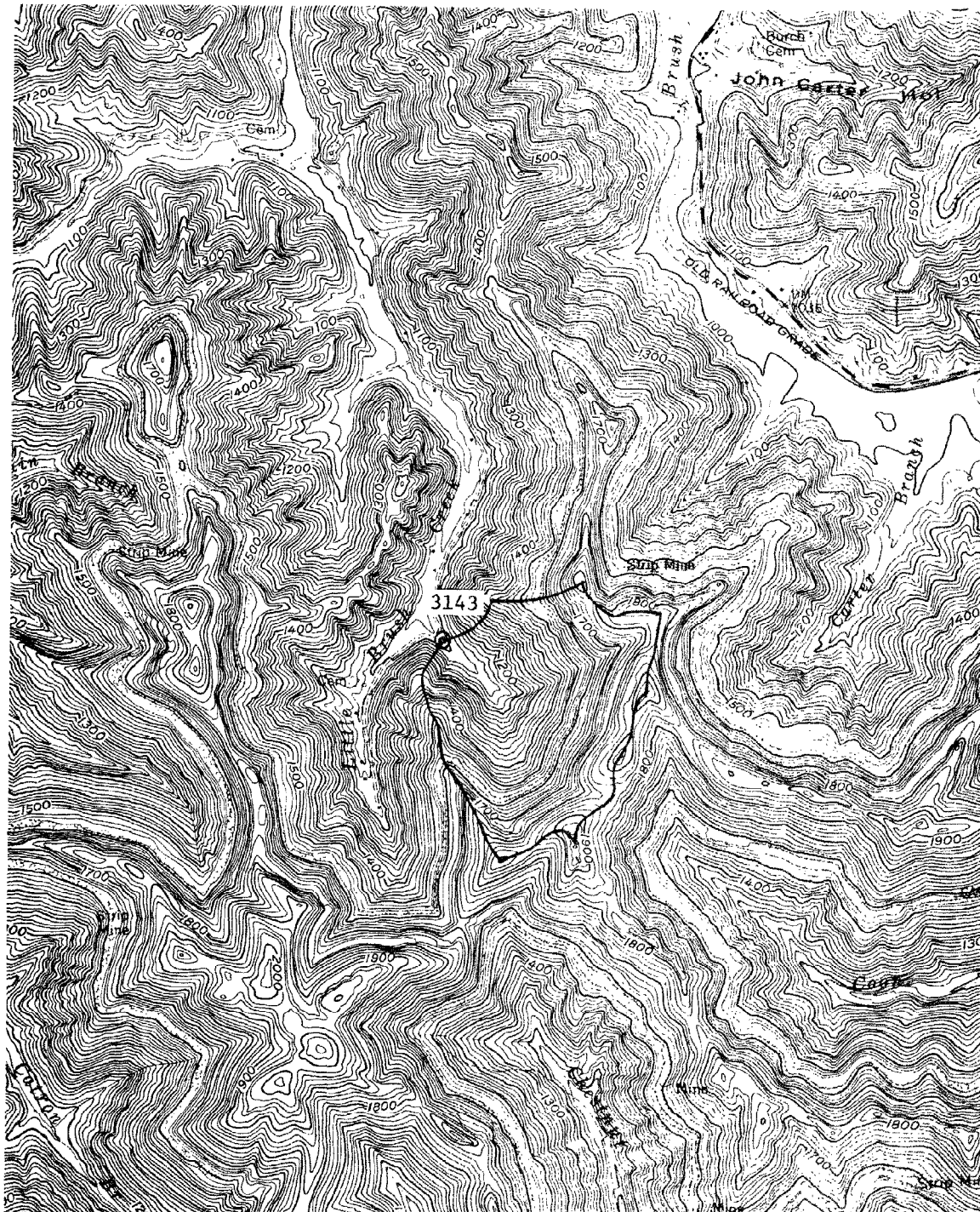


Figure 33. Location map for site 3143, Knox Co., Kentucky. Artemus Quadrangle.

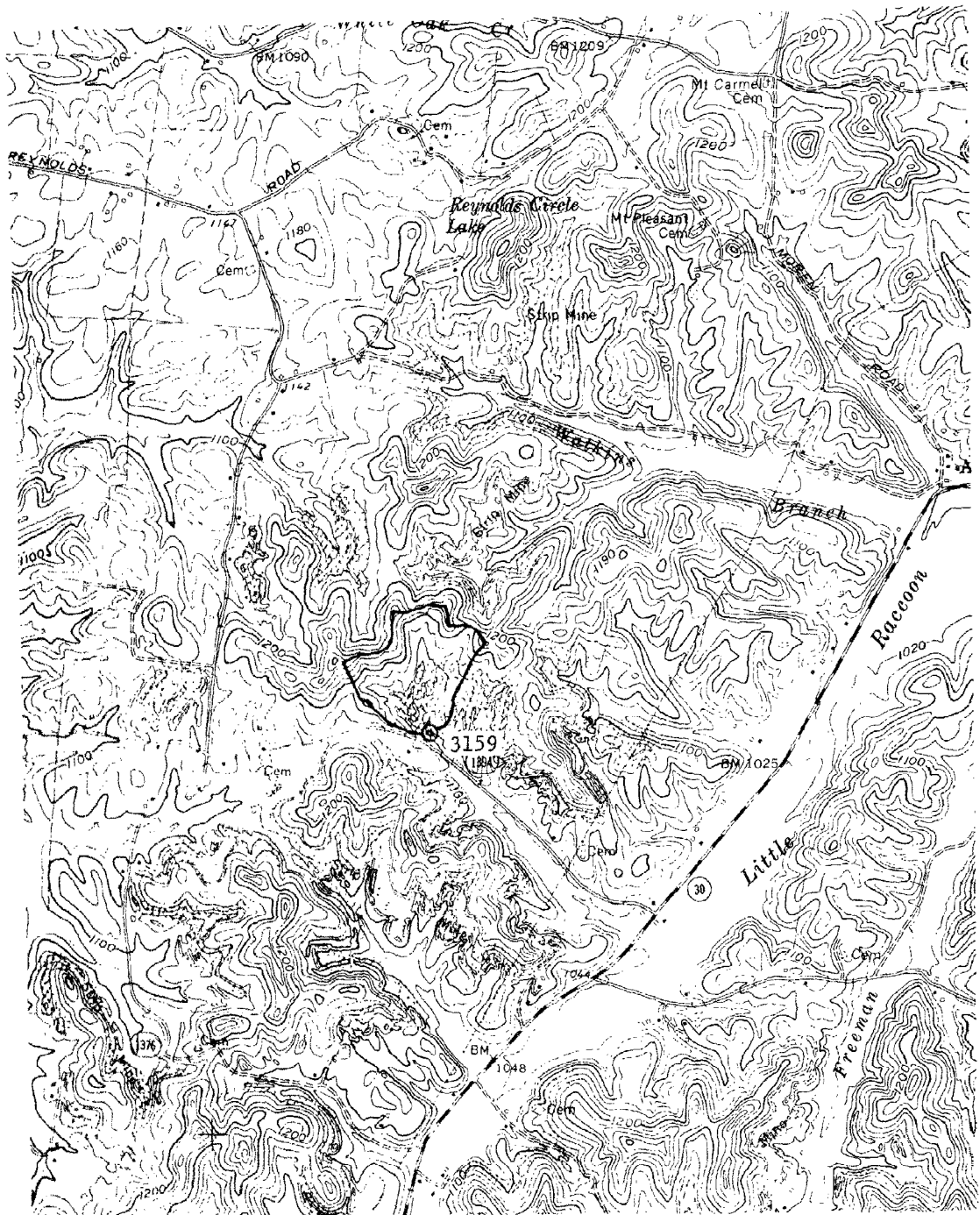


Figure 36. Location map for site 3159, Laurel Co., Kentucky. London Quadrangle.

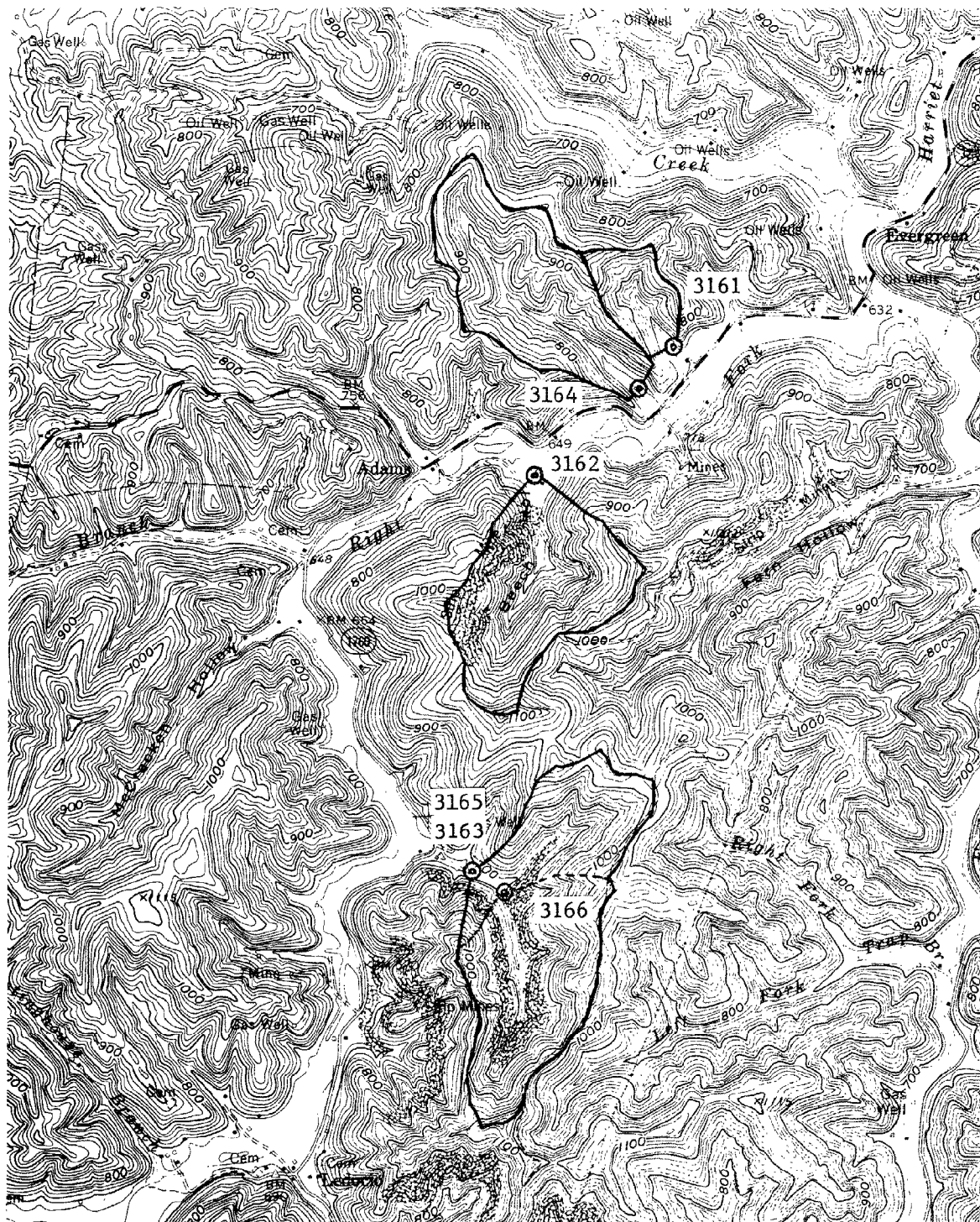


Figure 37. Location map for sites 3161, 3162, 3163, 3164, 3165, and 3166, Lawrence Co., Kentucky. Adams Quadrangle.

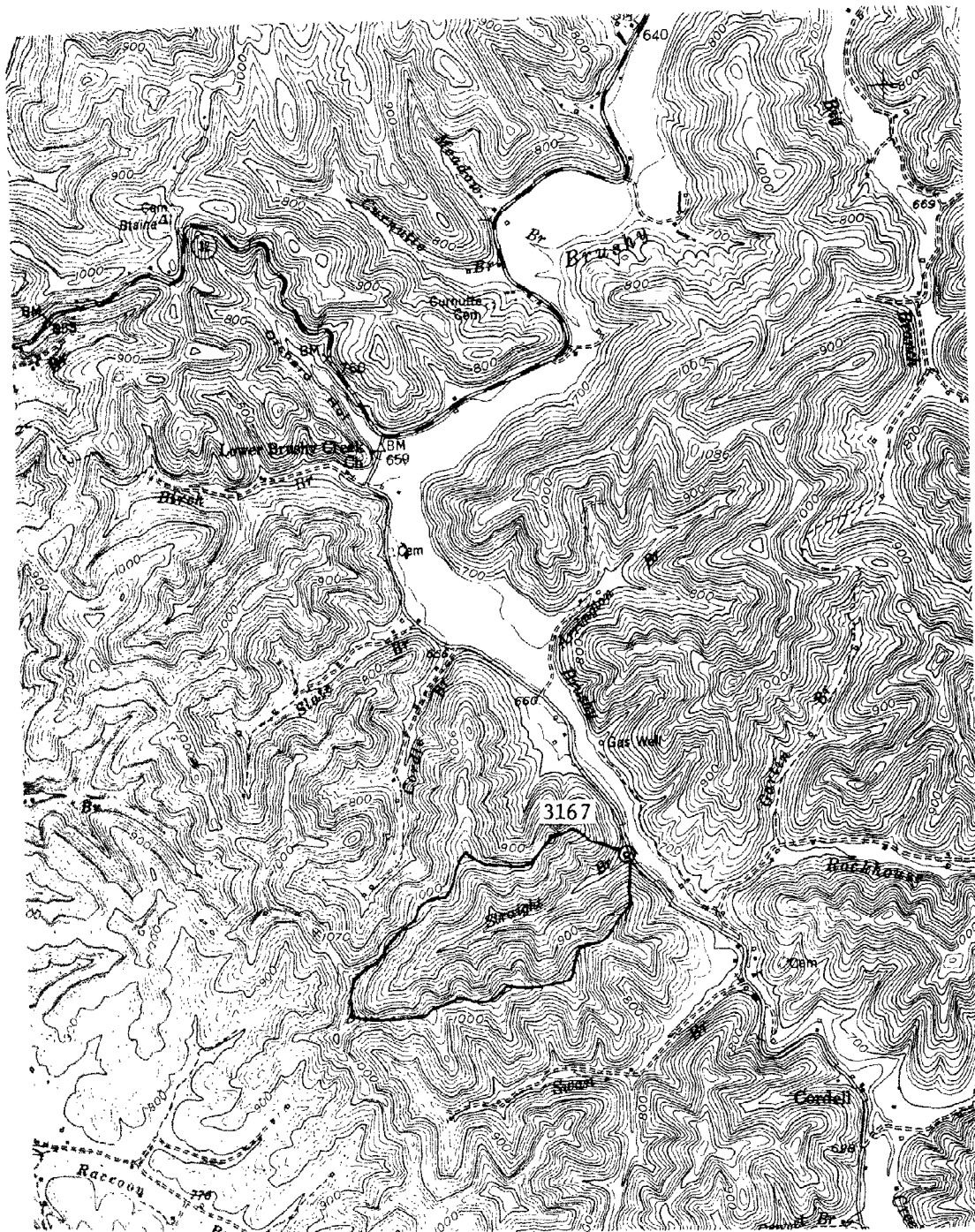


Figure 38. Location map for site 3167, Lawrence Co., Kentucky. Blaine Quadrangle.

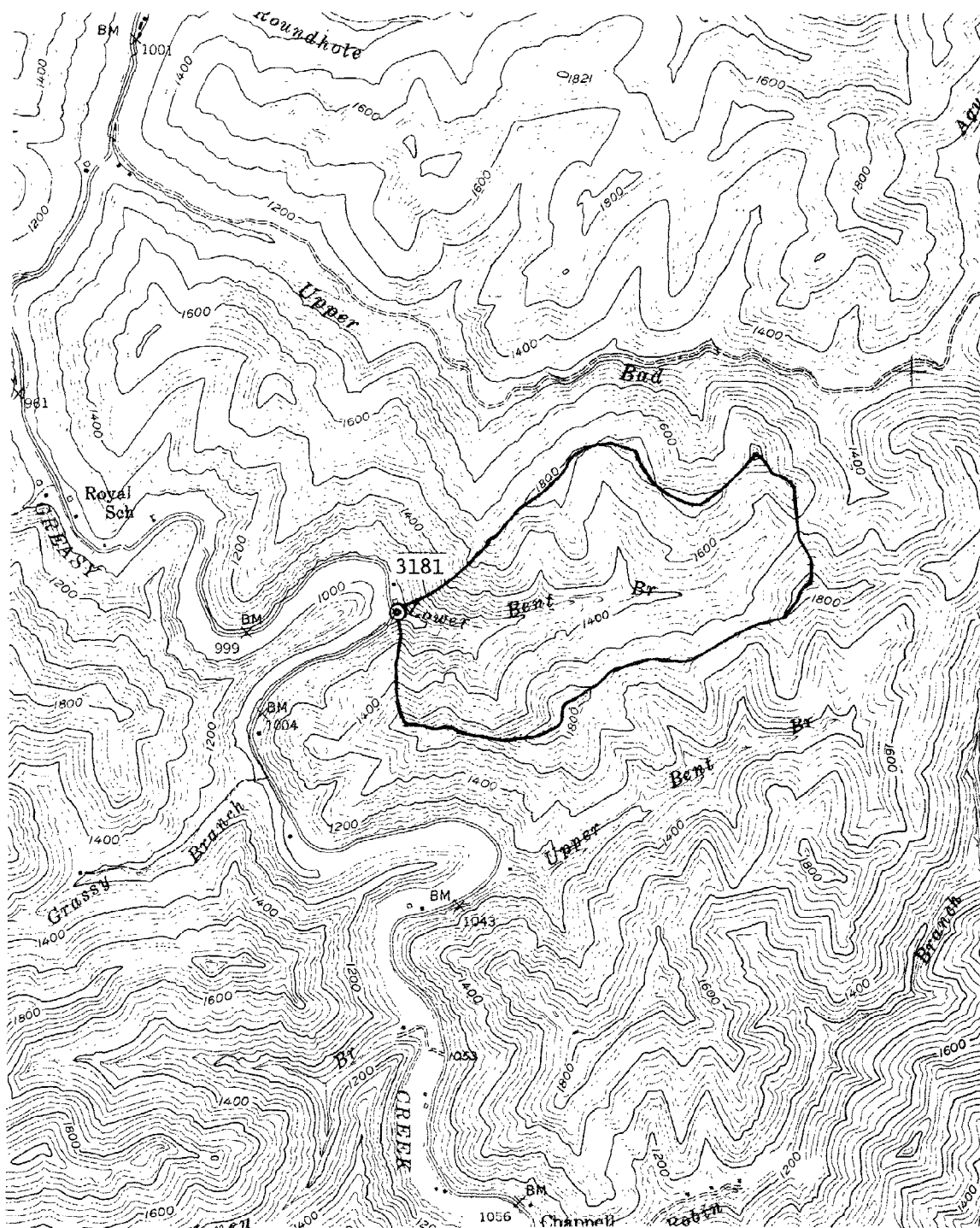


Figure 39. Location map for site 3181, Leslie Co., Kentucky. Cutshin Quadrangle.

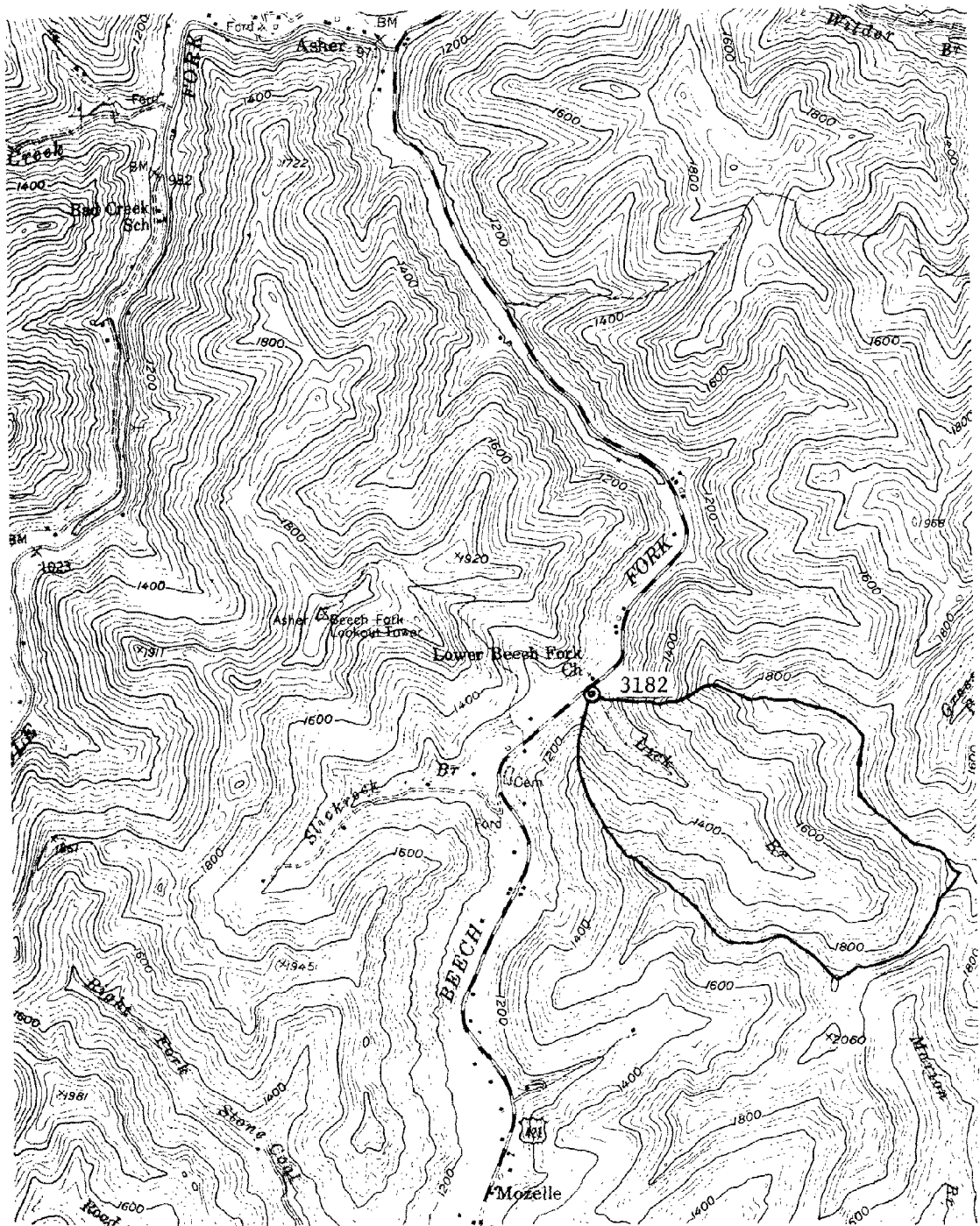


Figure 40. Location map for site 3182, Leslie Co., Kentucky. Hoskinson Quadrangle.

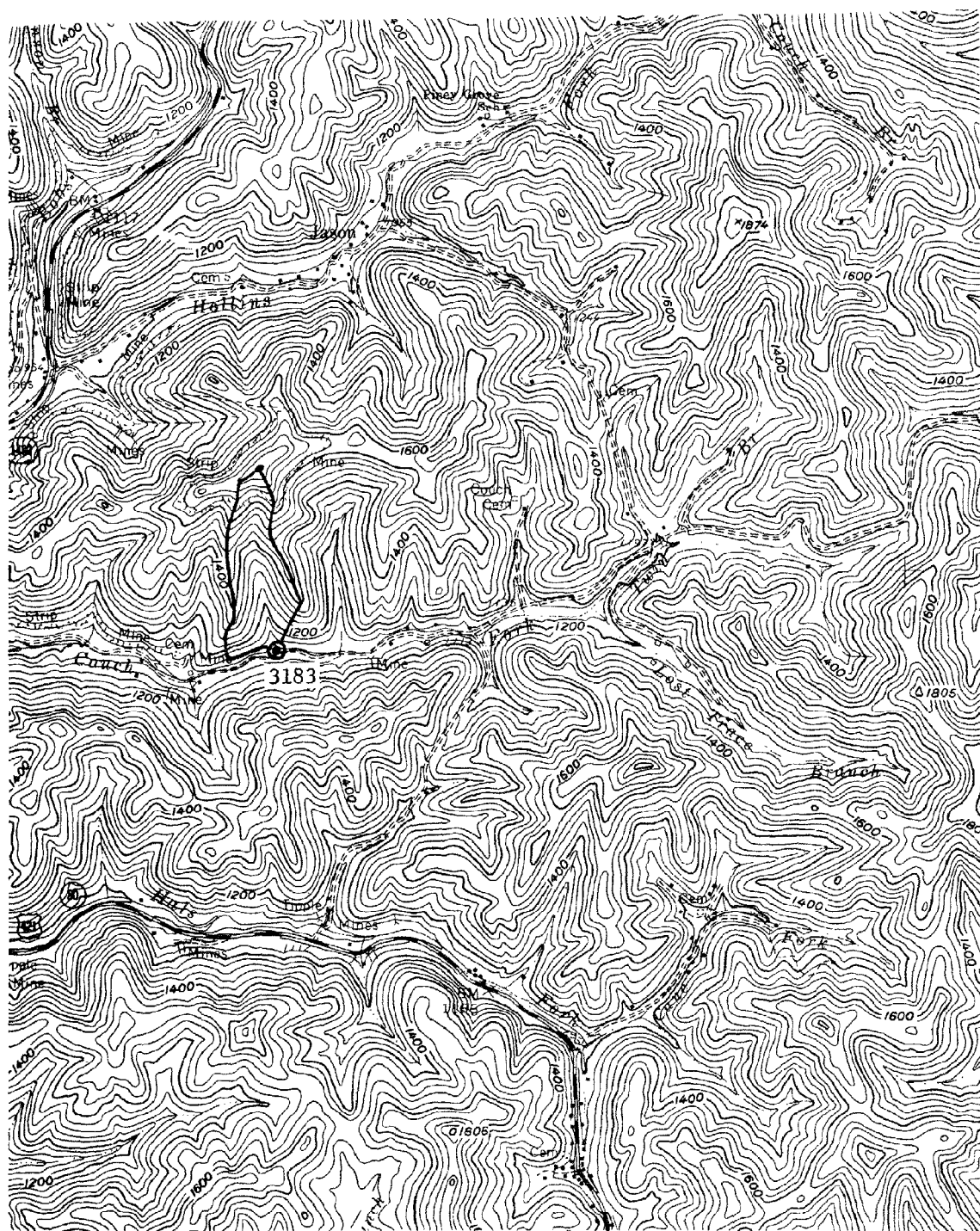


Figure 41. Location map for site 3183, Leslie Co., Kentucky. Hyden West Quadrangle.

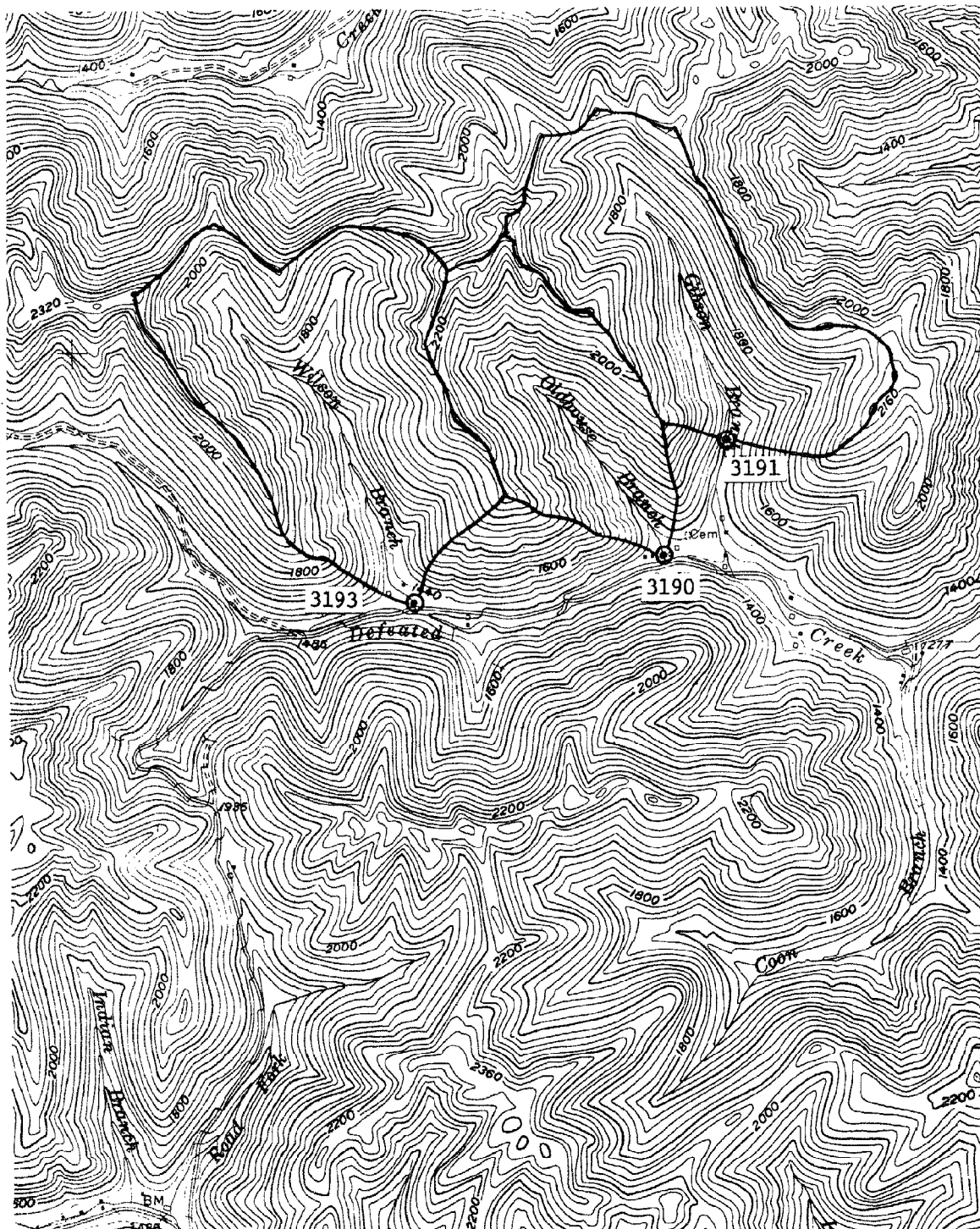


Figure 42. Location map for sites 3190, 3191, and 3193, Letcher Co., Kentucky. Tilford Quadrangle.

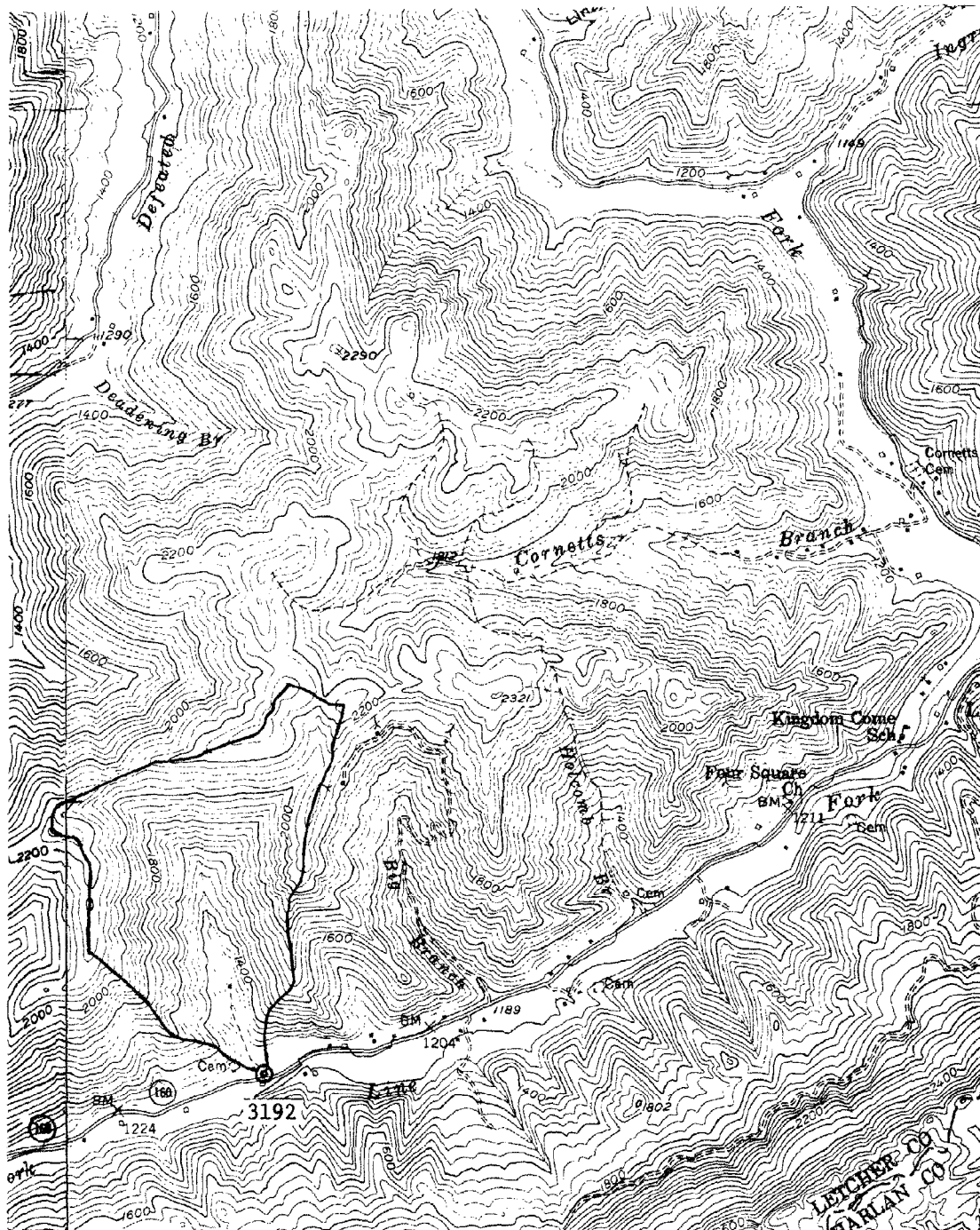


Figure 43. Location map for site 3192, Letcher Co., Kentucky. Roxana and Tilford Quadrangles.

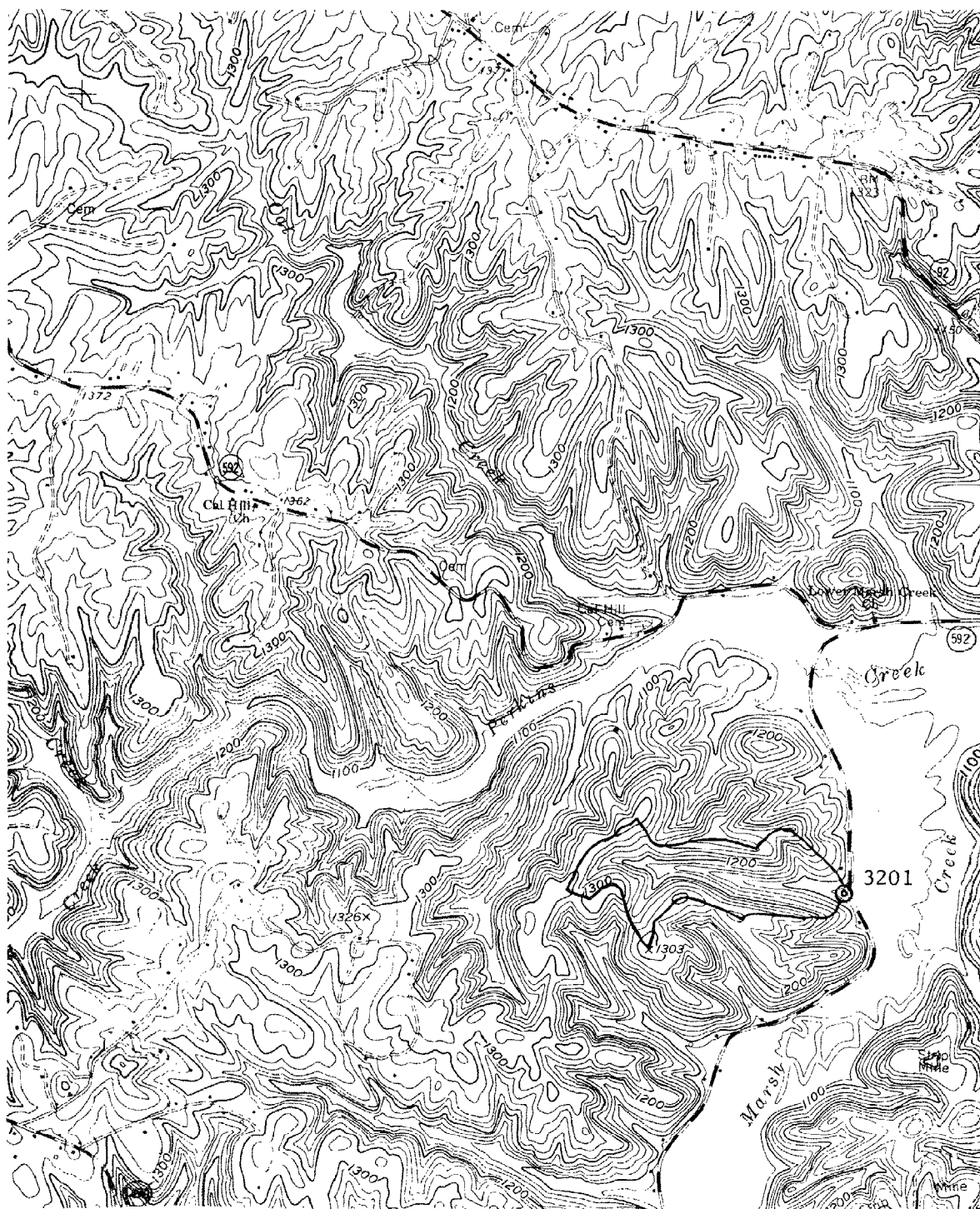


Figure 44. Location map for site 3201, McCreary Co., Kentucky. Whitley City Quadrangle.

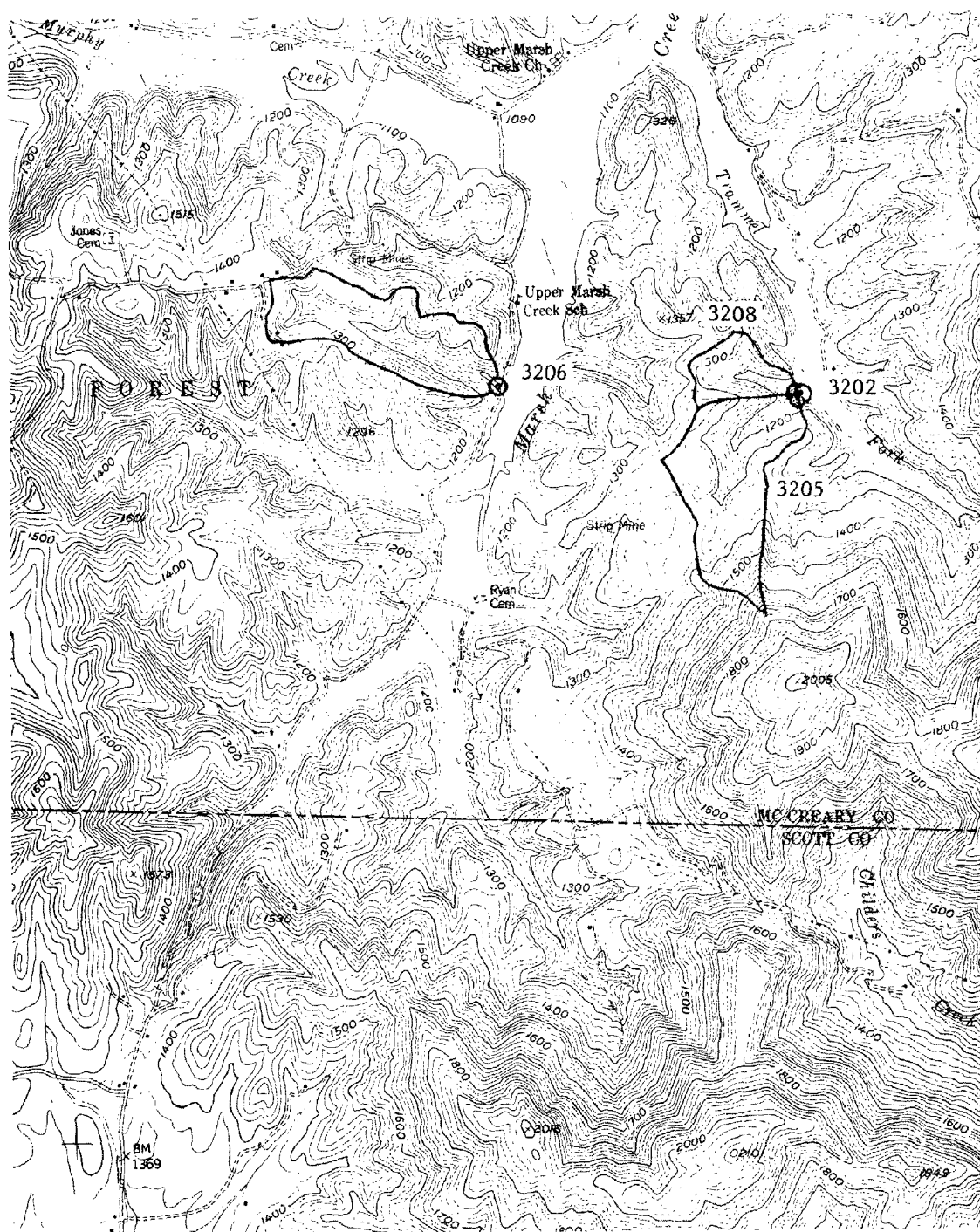


Figure 45. Location map for sites 3202, 3205, 3206, and 3208, McCreary Co., Kentucky. Winfield Quadrangle.



Figure 46. Location map for site 3203, McCreary Co., Kentucky. Hollyhill Quadrangle.



Figure 47. Location map for sites 3211 and 3214, Magoffin Co., Kentucky. Salyersville North Quadrangle.

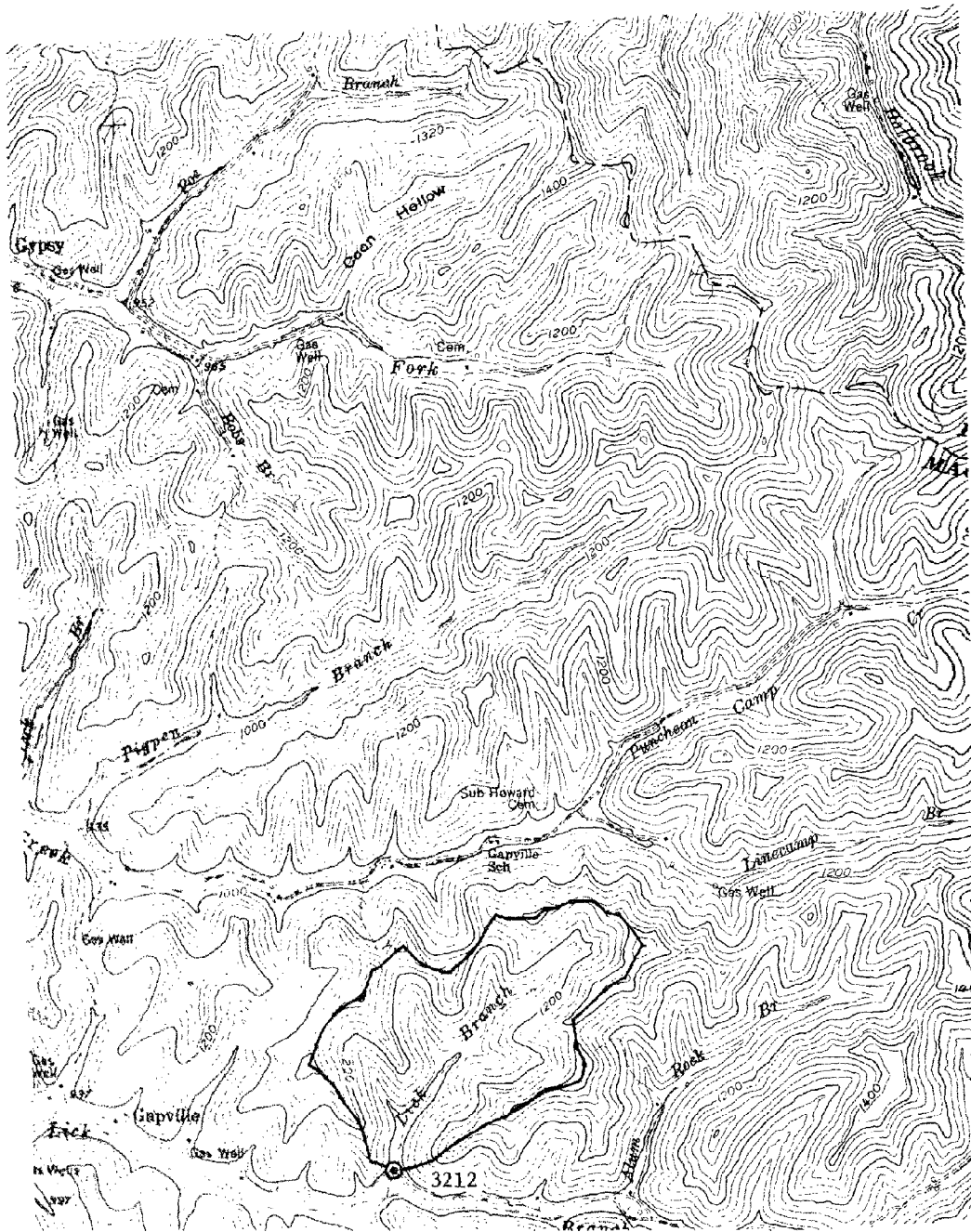


Figure 48. Location map for site 3212, Magoffin Co., Kentucky. Ivyton Quadrangle.

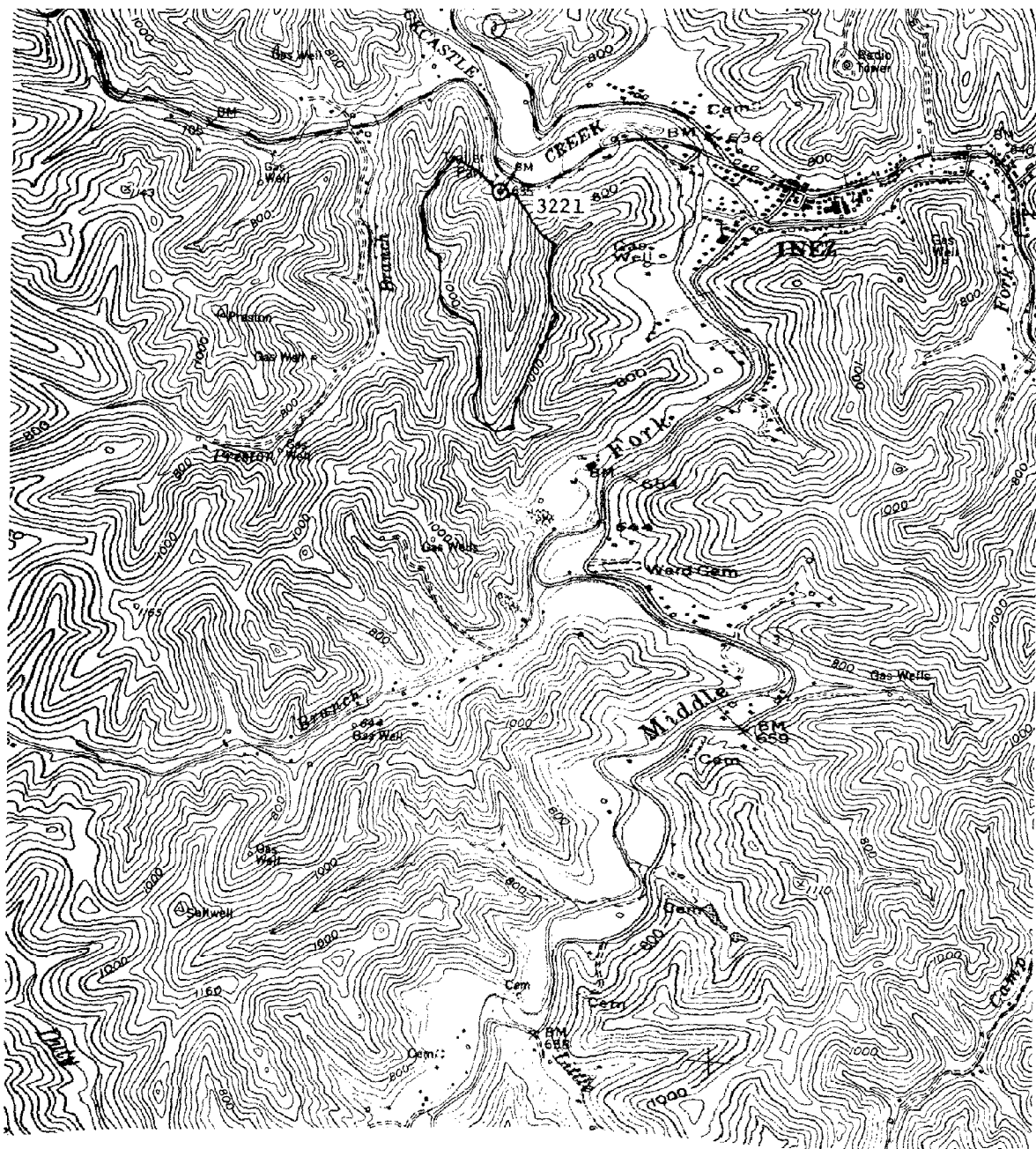


Figure 49. Location map for site 3221, Martin Co., Kentucky. Inez Quadrangle.

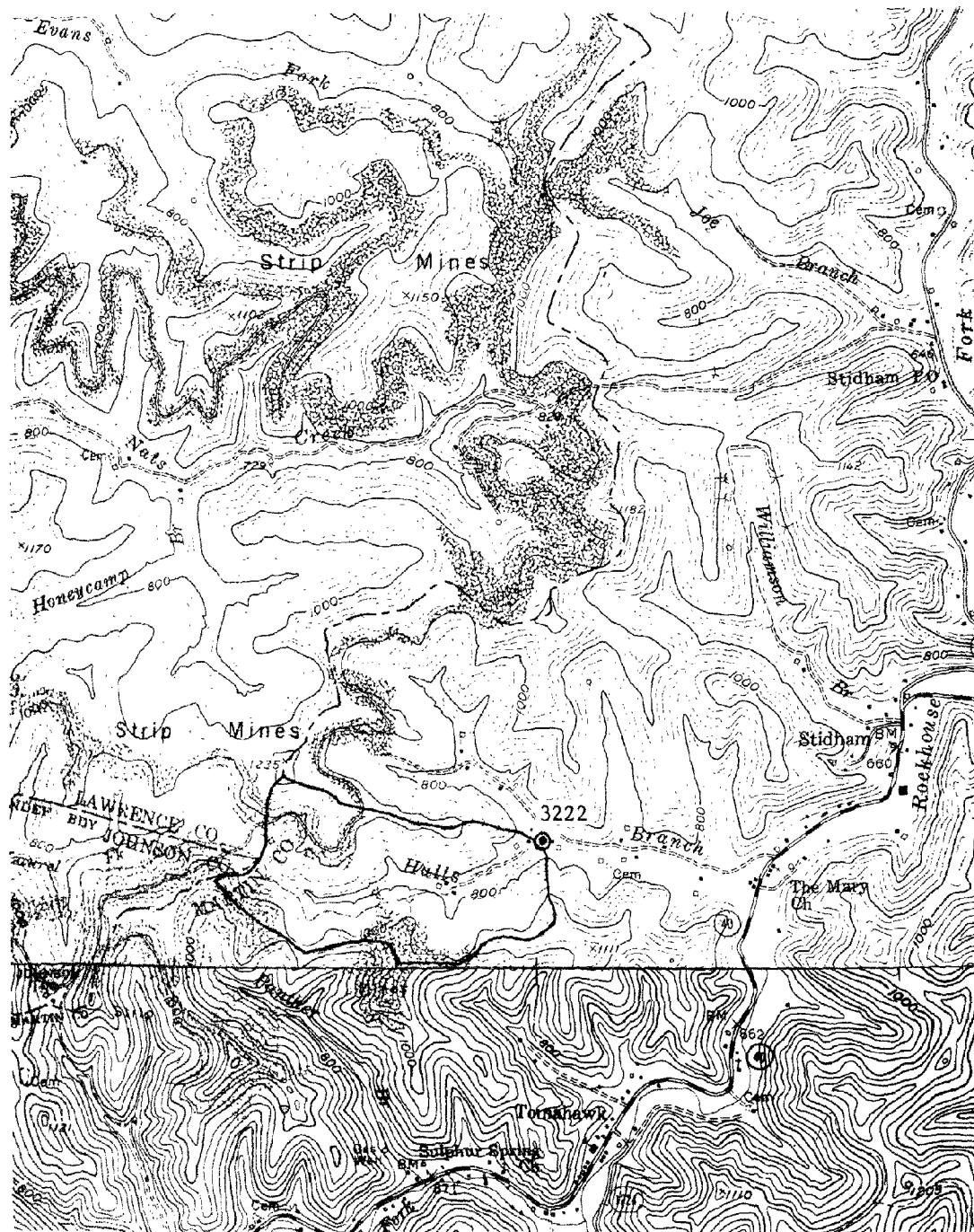


Figure 50. Location map for site 3222, Martin Co., Kentucky. Milo and Inez Quadrangles.



Figure 51. Location map for site 3223, Martin Co., Kentucky. Offutt Quadrangle.

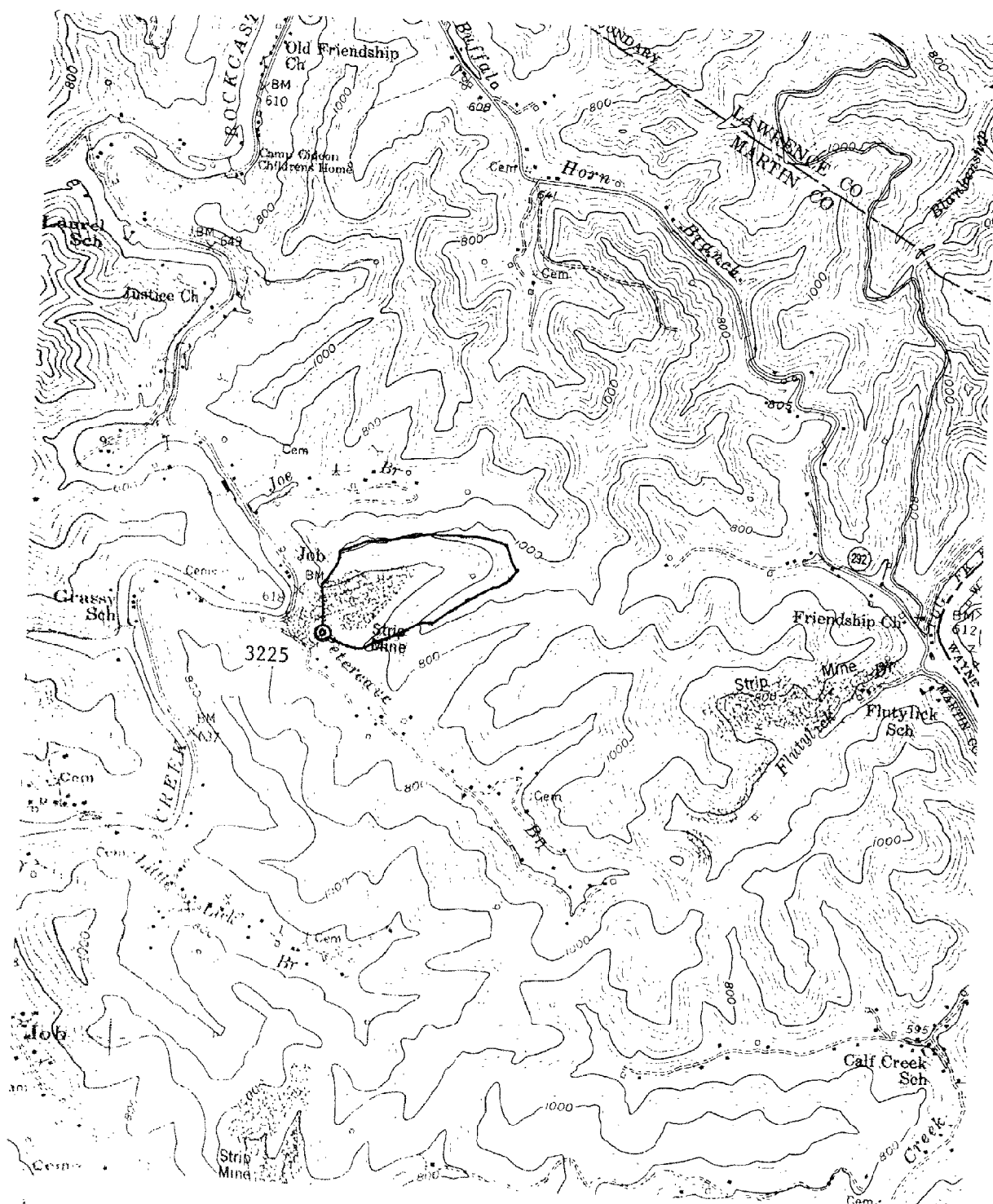


Figure 52. Location map for site 3225, Martin Co., Kentucky. Milo Quadrangle.

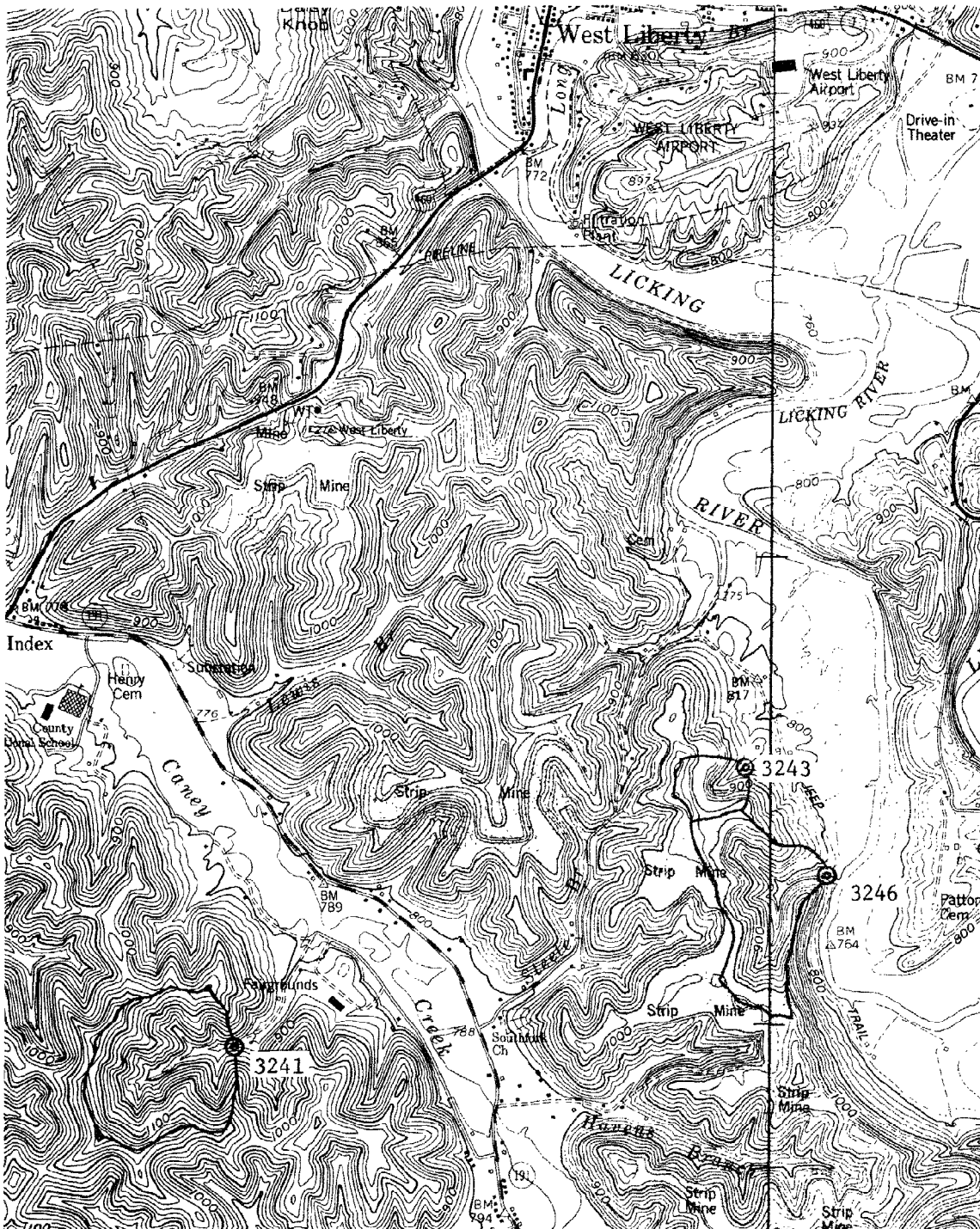


Figure 53. Location map for sites 3241, 3243, and 3246, Morgan Co., Kentucky. West Liberty and Lenox Quadrangles.

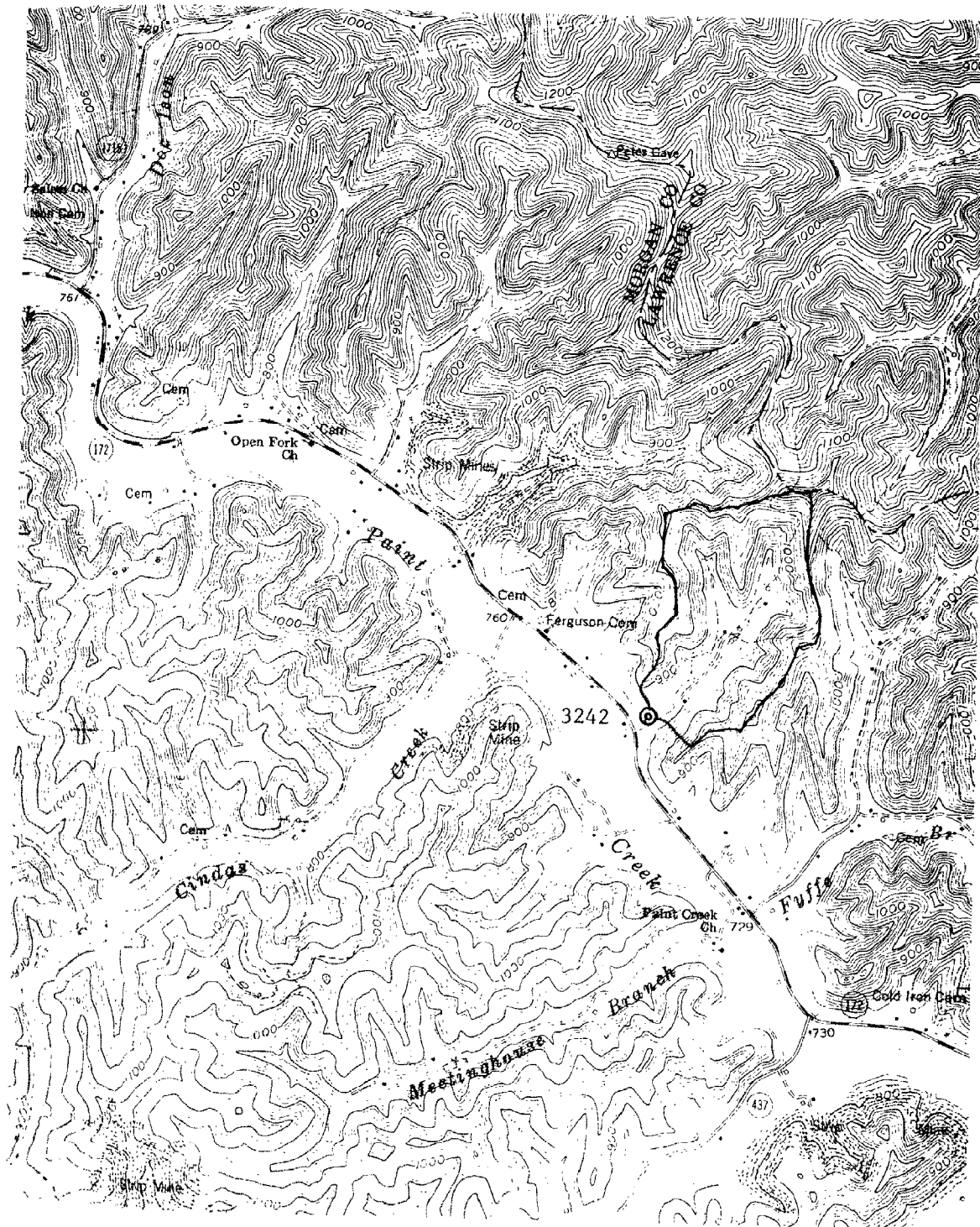


Figure 54. Location map for site 3242, Morgan Co., Kentucky. Dingus Quadrangle.

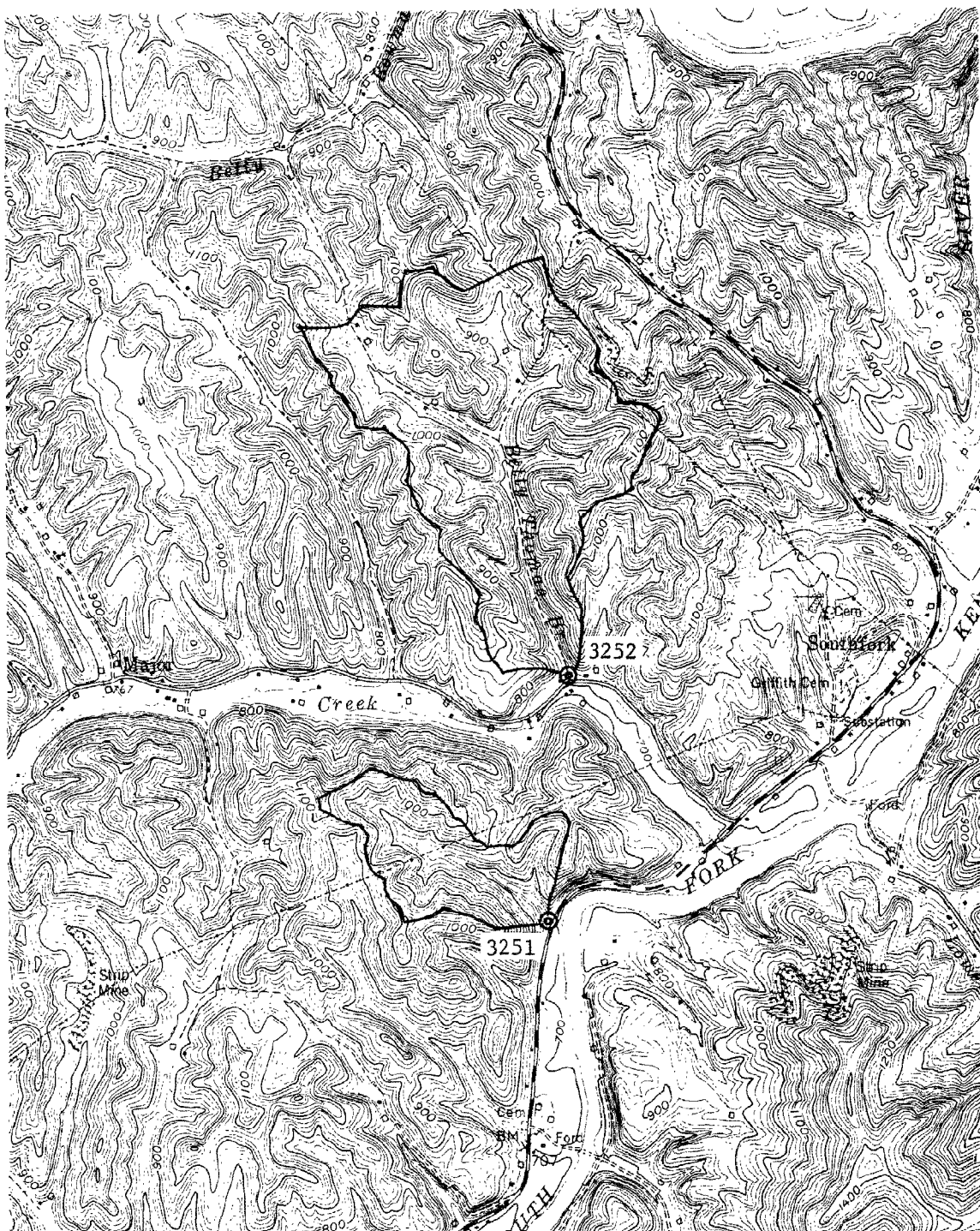


Figure 55. Location map for sites 3251 and 3252, Owsley Co., Kentucky.
Booneville Quadrangle.

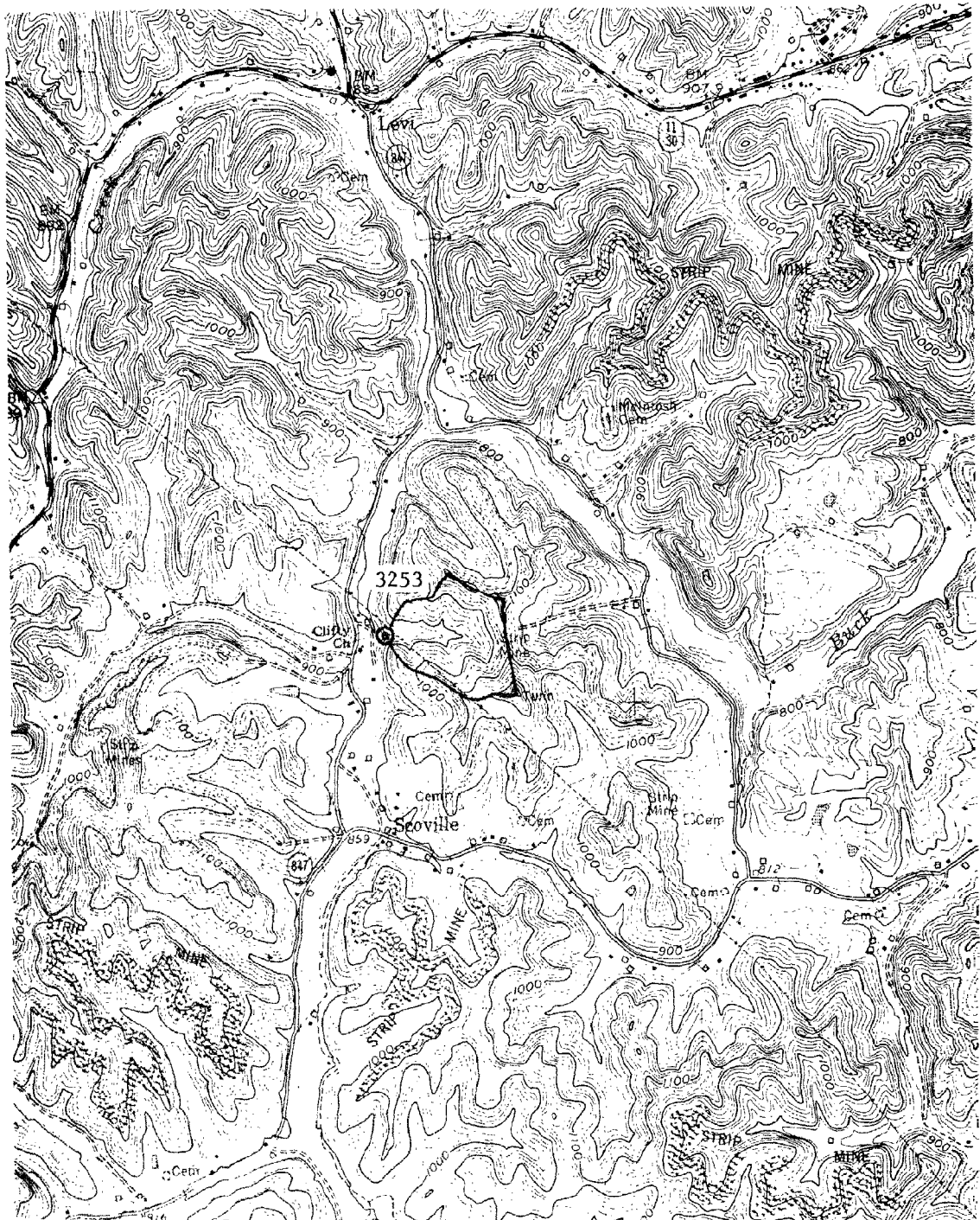


Figure 56. Location map for site 3253, Owsley Co., Kentucky. Booneville Quadrangle.

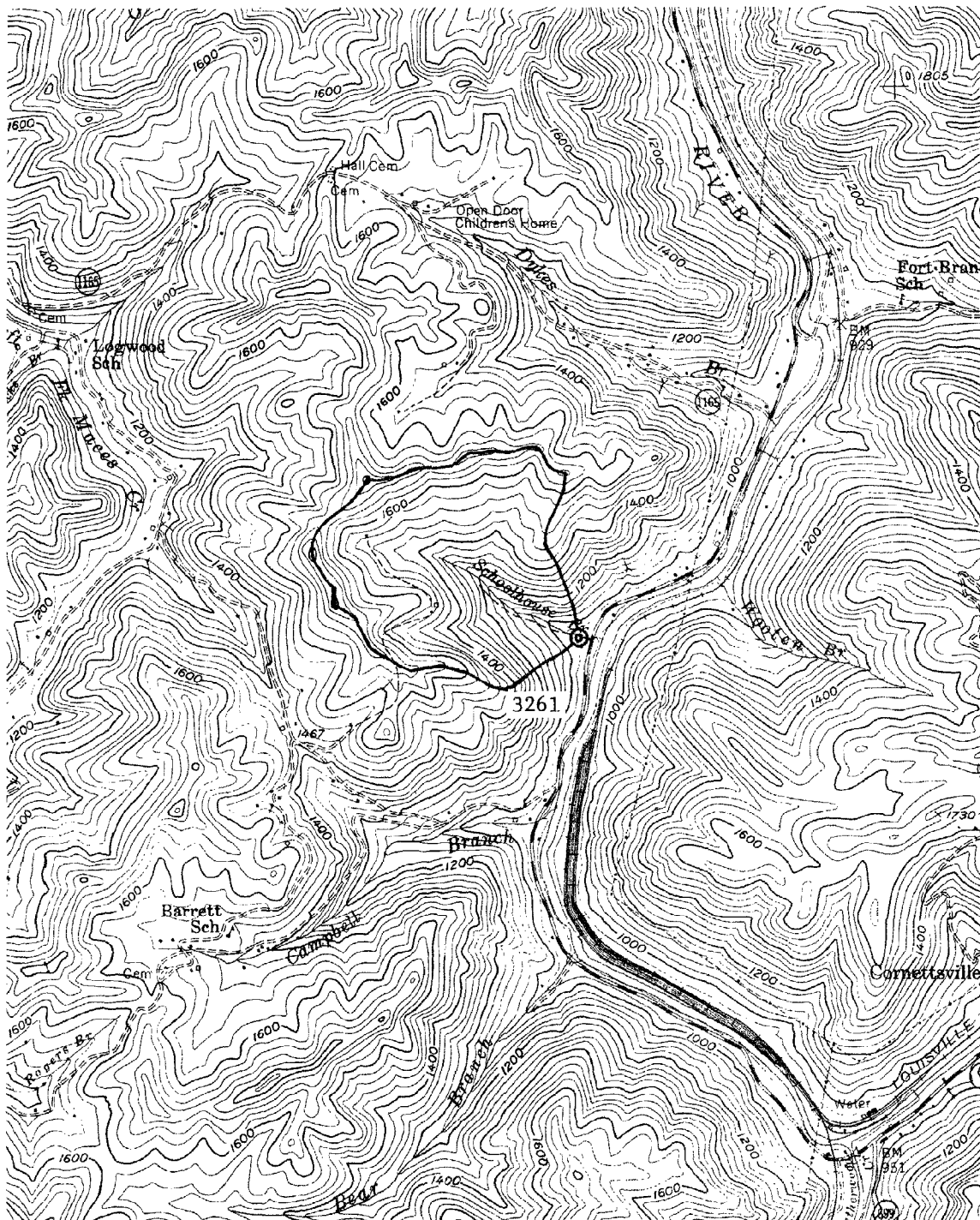


Figure 57. Location map for site 3261, Perry Co., Kentucky. Vicco Quadrangle.

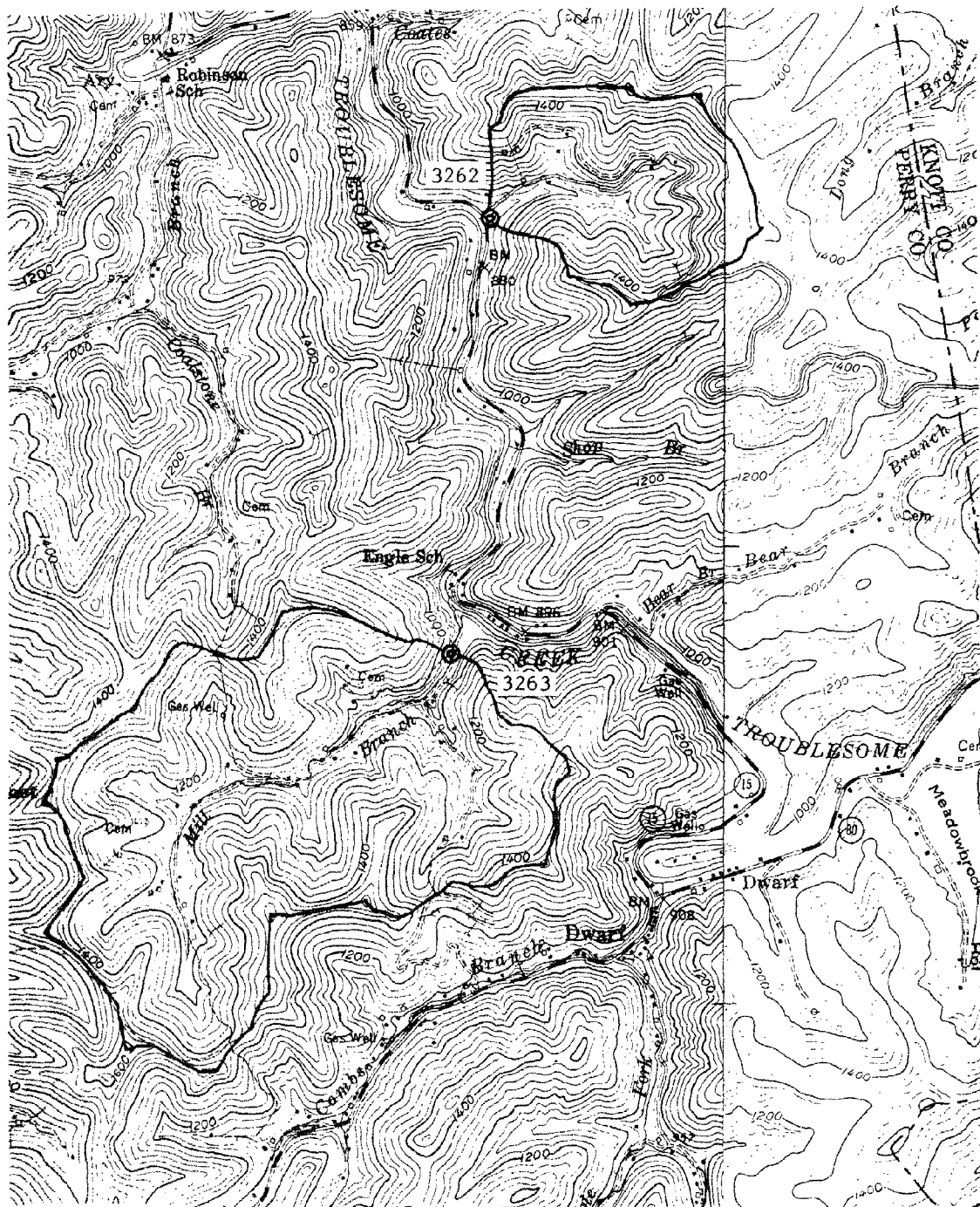


Figure 58. Location map for sites 3262 and 3263, Perry Co., Kentucky.
Hazard North and Carrie Quadrangles.

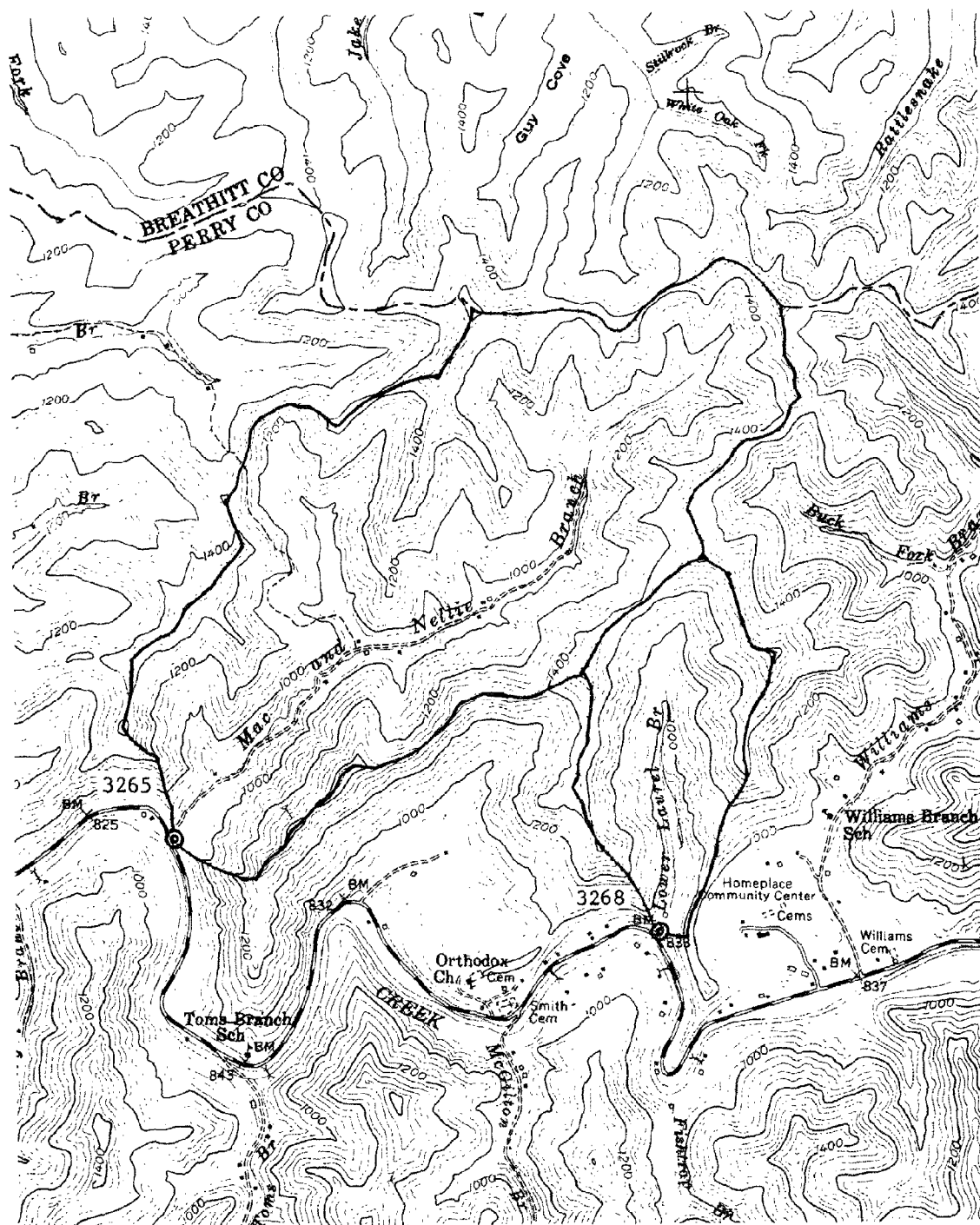


Figure 59. Location map for sites 3265 and 3268, Perry Co., Kentucky.
Noble Quadrangle.

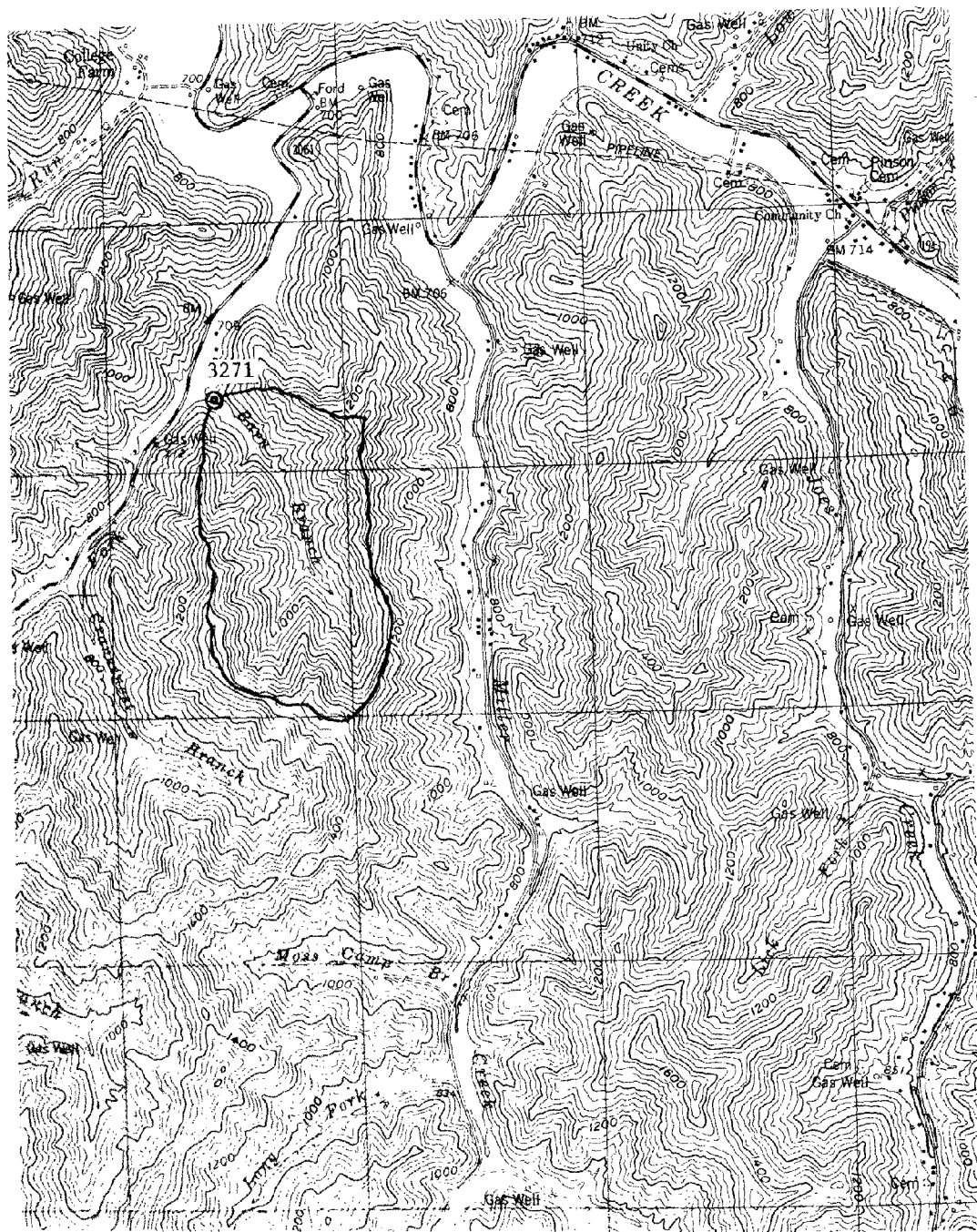


Figure 60. Location map for site 3271, Pike Co., Kentucky. Broad Bottom Quadrangle.

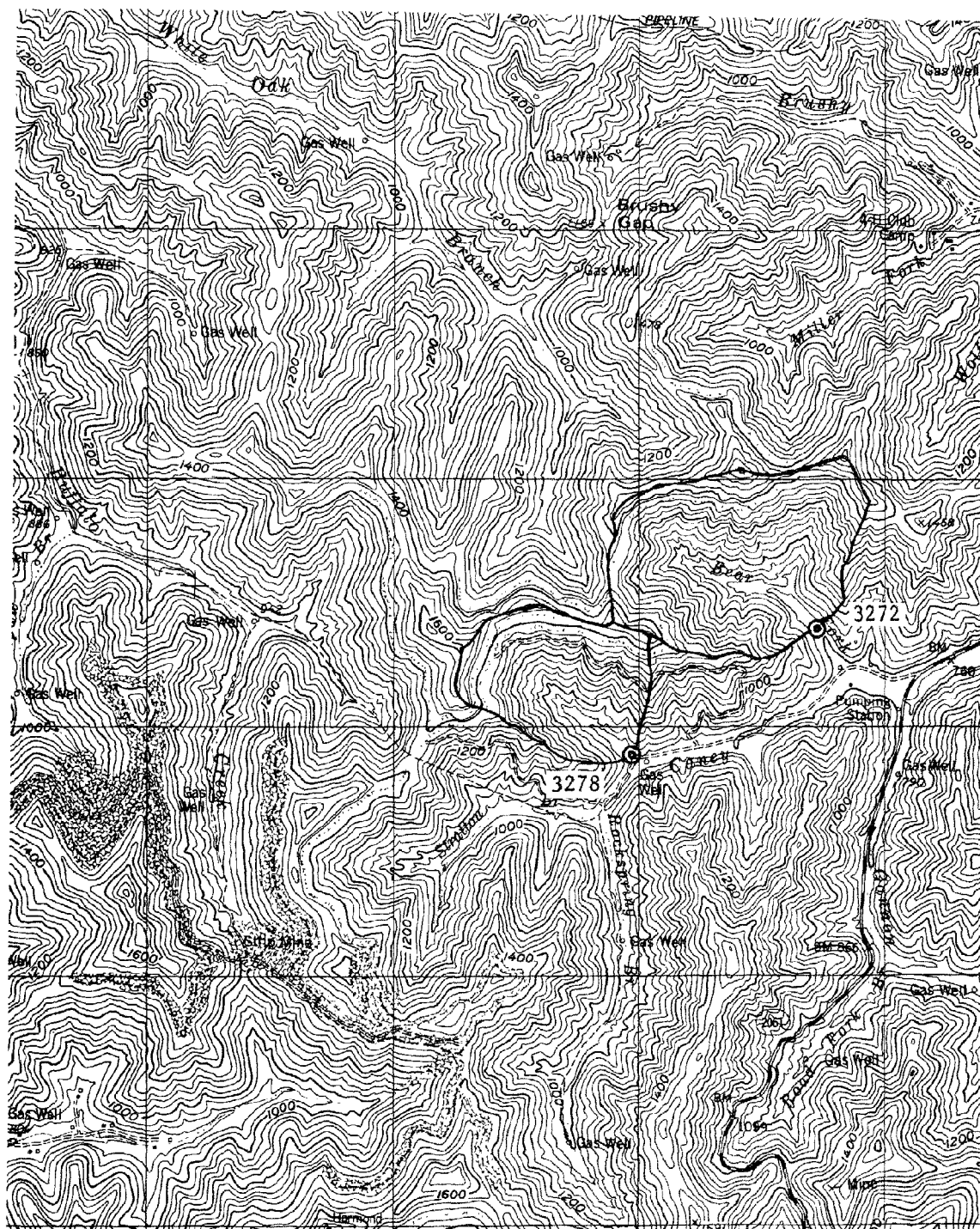


Figure 61. Location map for sites 3272 and 3278, Pike Co., Kentucky. Broad Bottom Quadrangle.

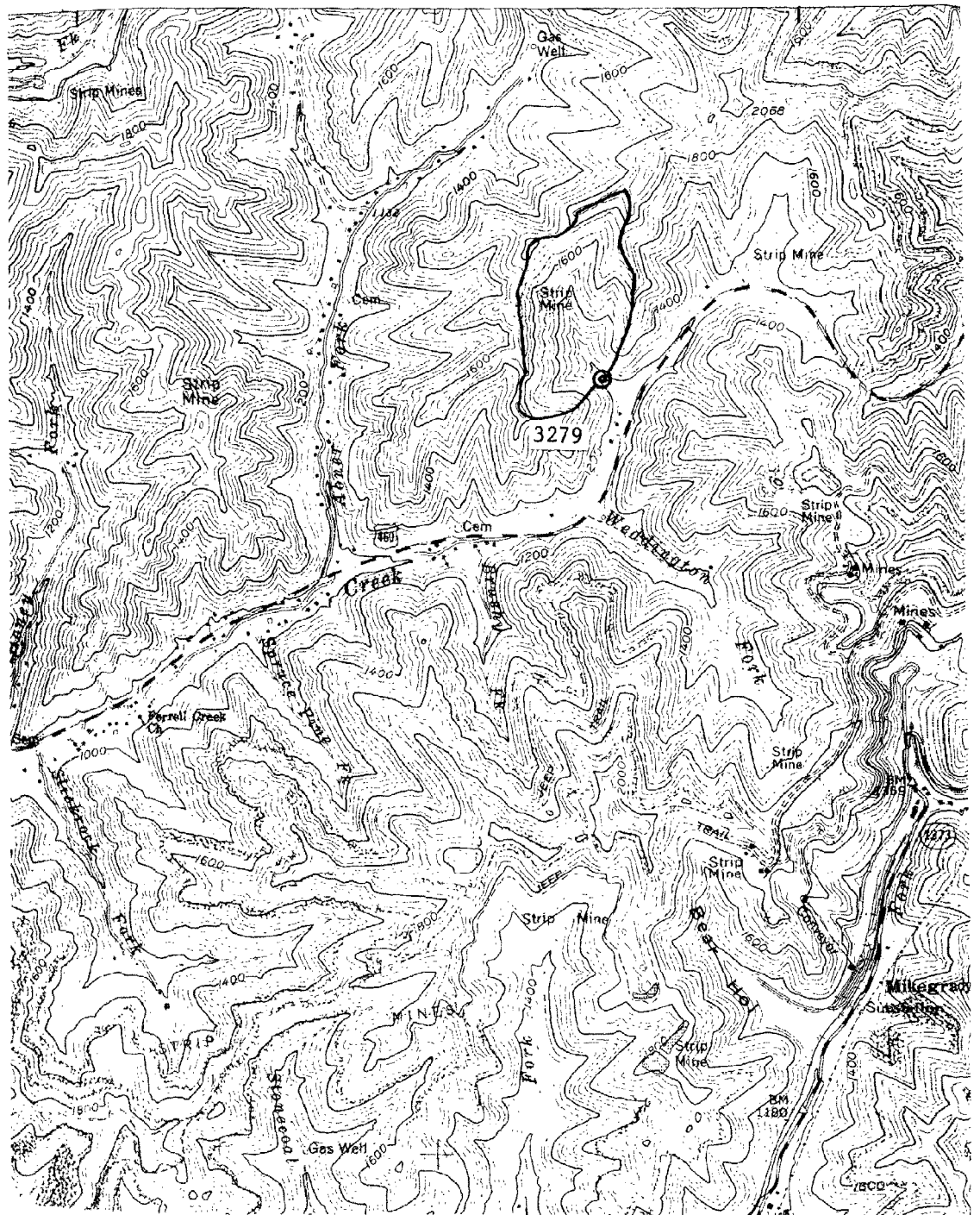


Figure 64. Location map for site 3279, Pike Co., Kentucky. Elkhorn City Quadrangle.

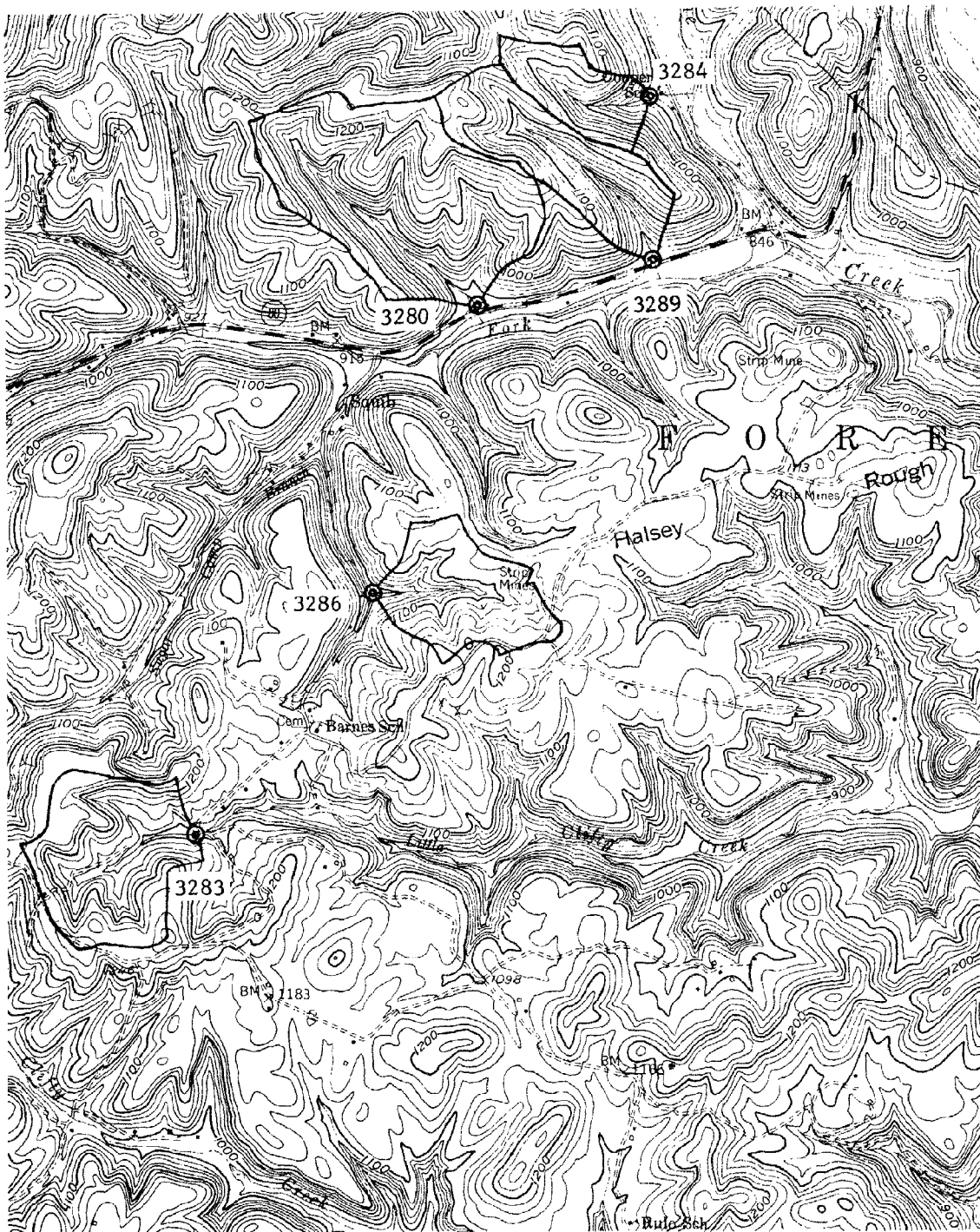


Figure 65. Location map for sites 3280, 3283, 3284, 3286, and 3289, Pulaski Co., Kentucky. Billows Quadrangle.

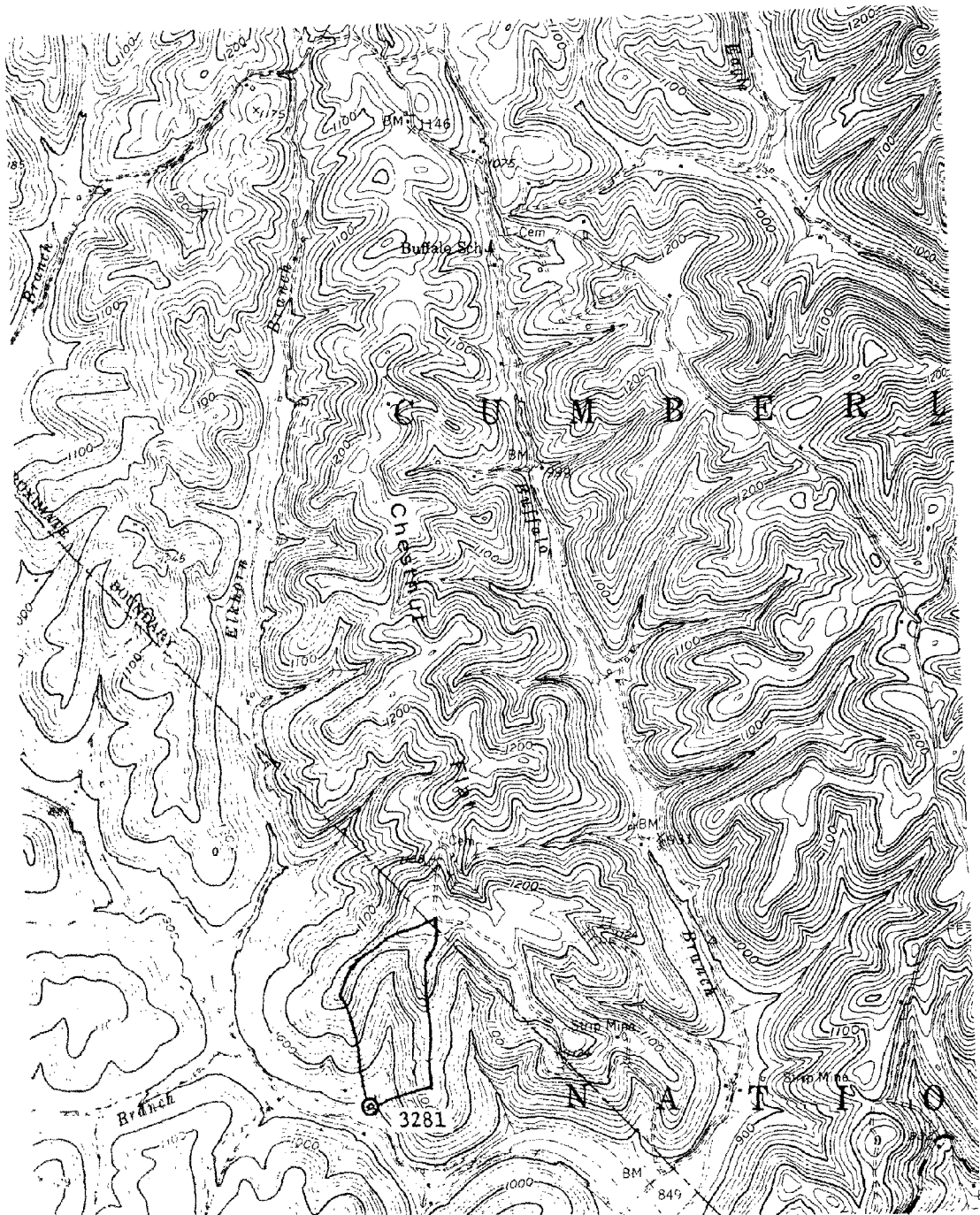


Figure 66. Location map for site 3281, Pulaski Co., Kentucky. Billows Quadrangle.

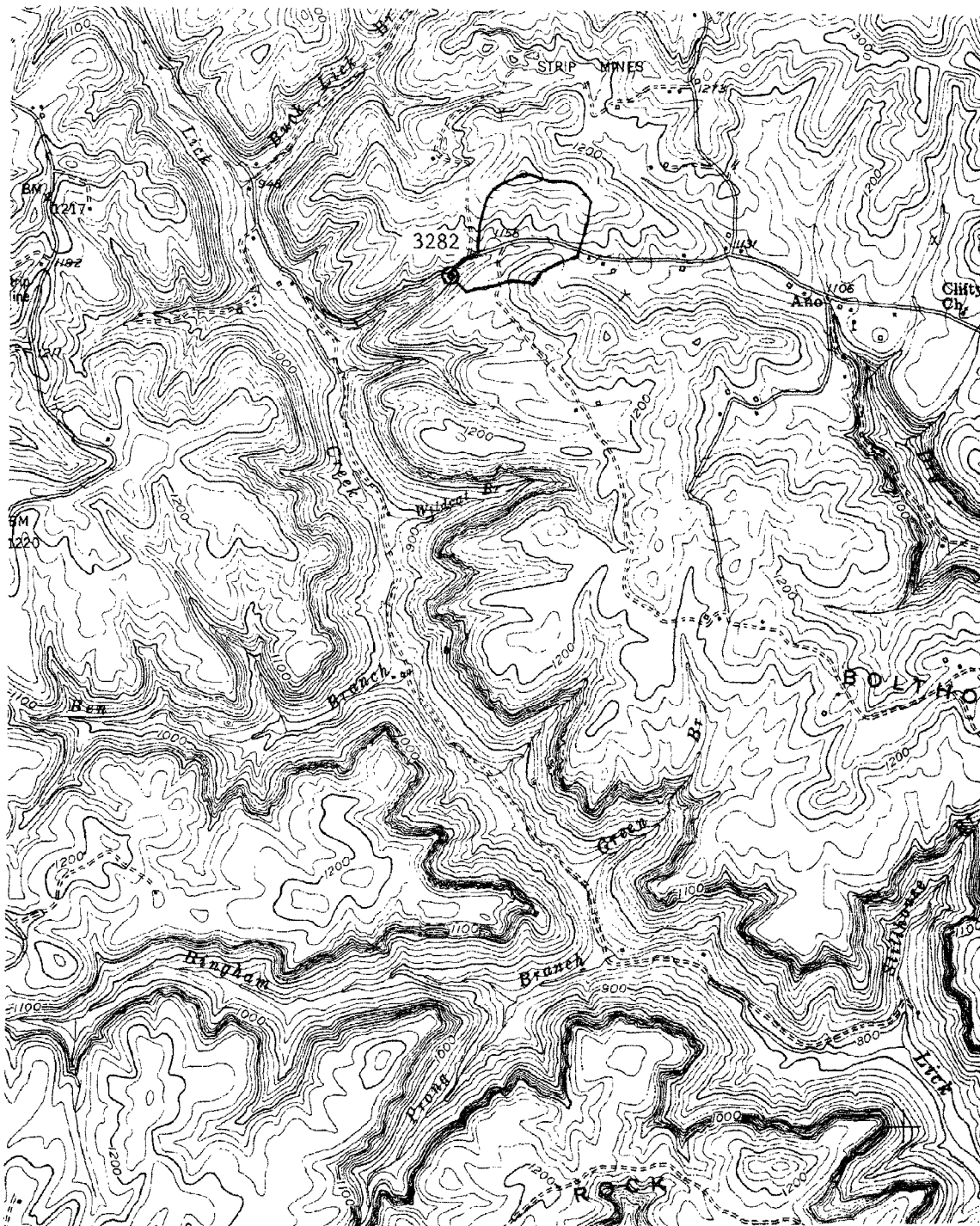


Figure 67. Location map for site 3282, Pulaski Co., Kentucky.
Ano Quadrangle.

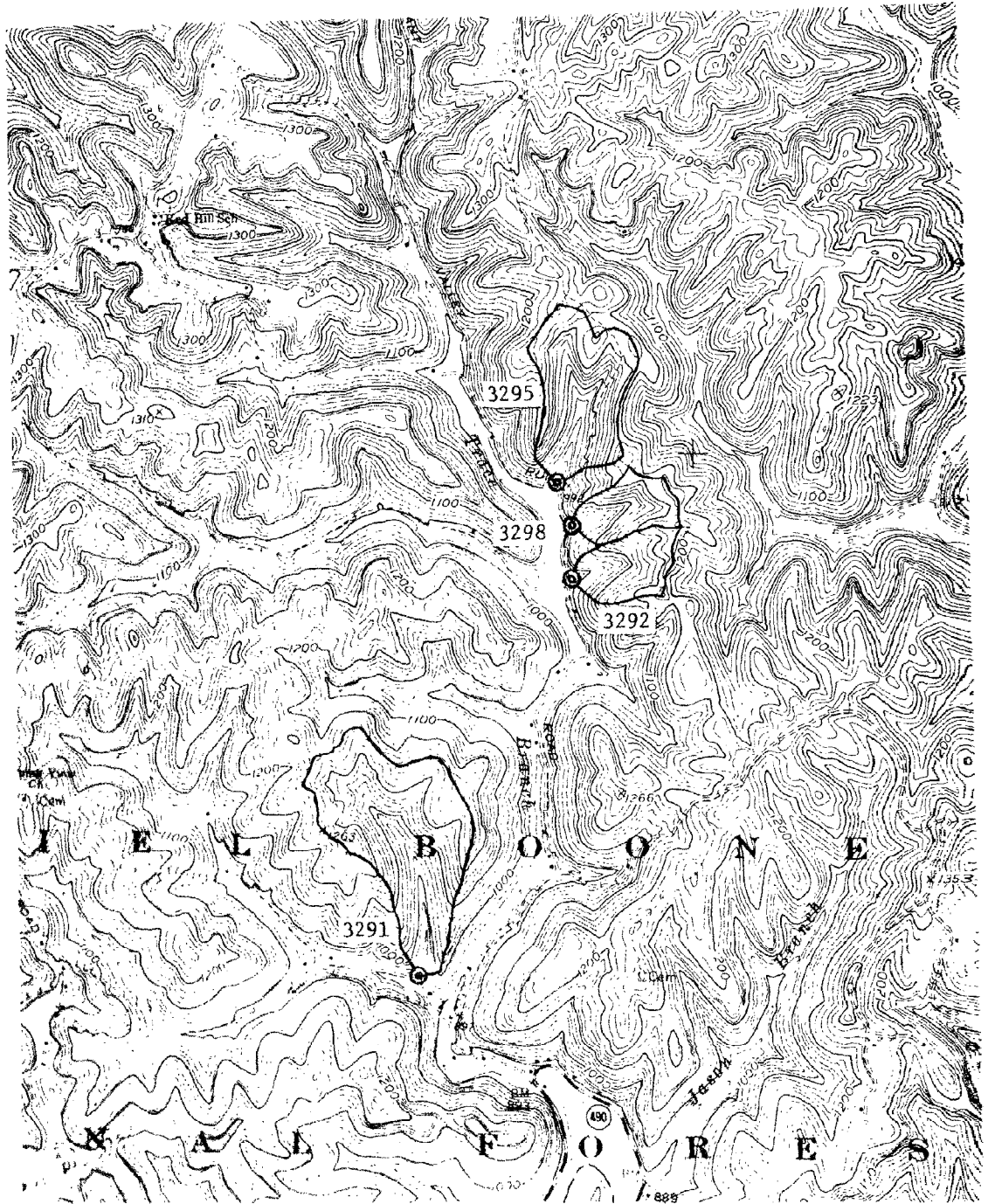


Figure 68. Location map for sites 3291, 3292, 3295, and 3298, Rockcastle Co., Kentucky. Livingston Quadrangle.

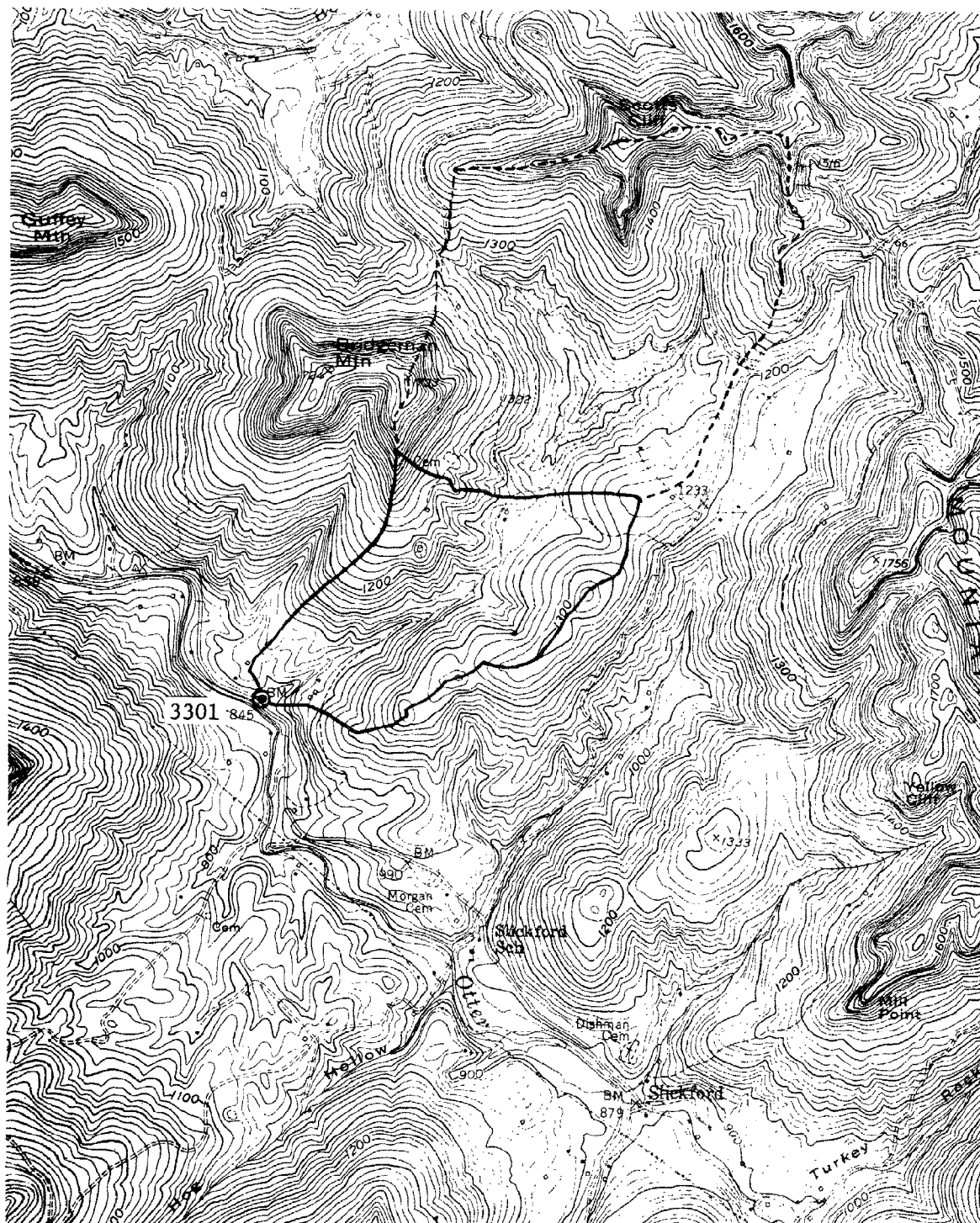


Figure 69. Location map for site 3301, Wayne Co., Kentucky. Powersburg Quadrangle.

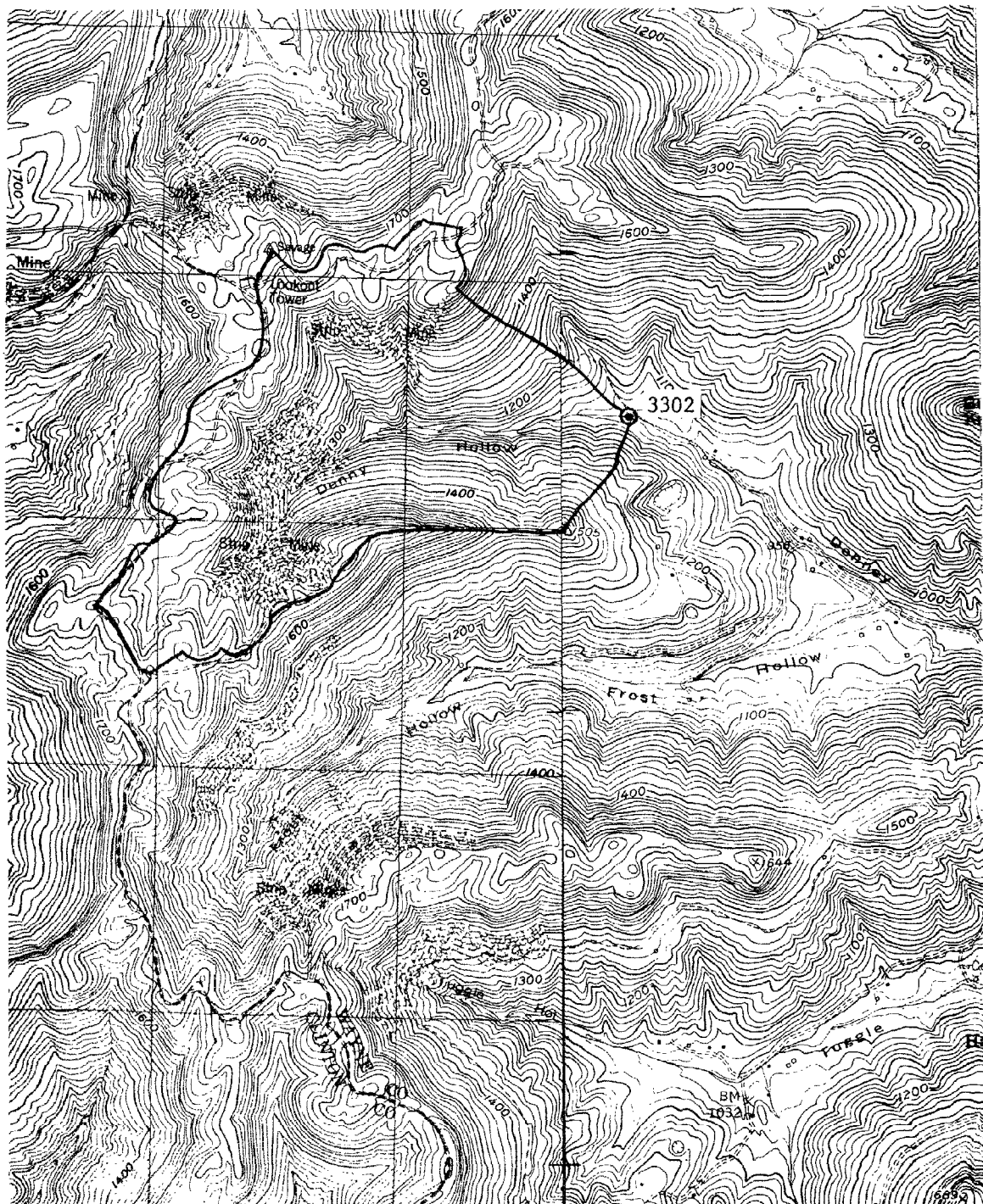


Figure 70. Location map for site 3302, Wayne Co., Kentucky. Powersburg and Savage Quadrangles.

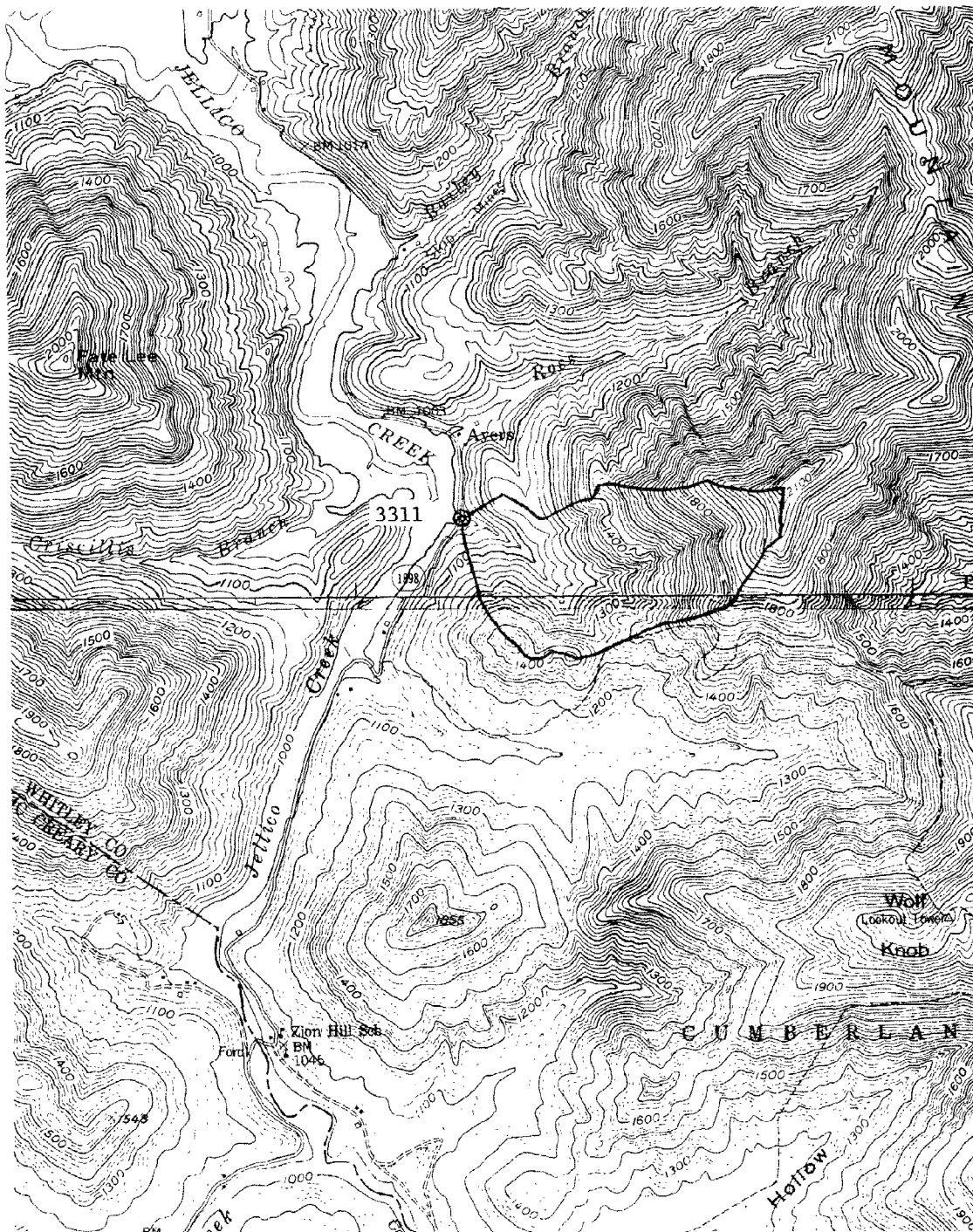


Figure 71. Location map for site 3311, Whitley Co., Kentucky. Williamsburg and Jellico West Quadrangles.

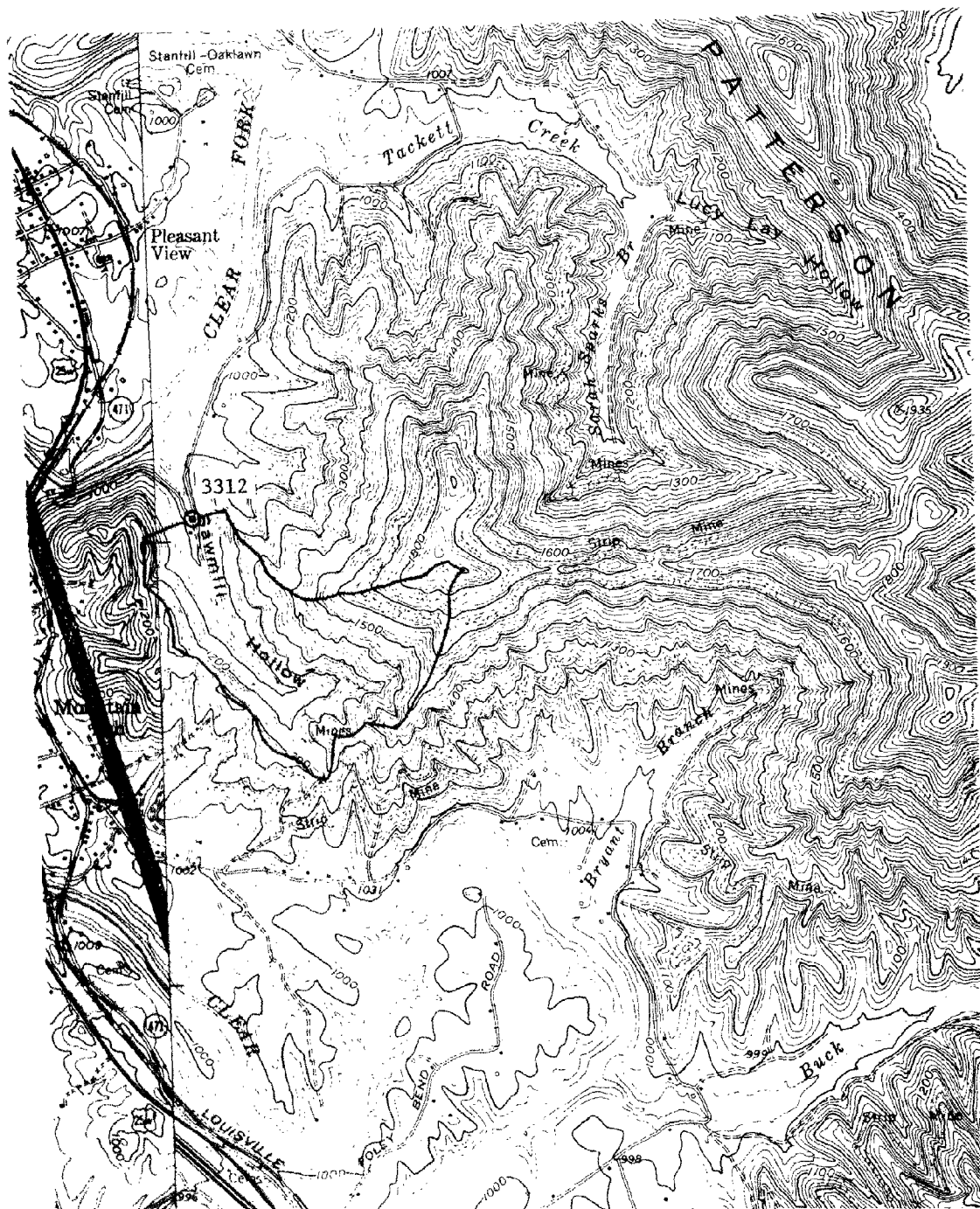


Figure 72. Location map for site 3312, Whitley Co., Kentucky. Saxton and Williamsburg Quadrangles.

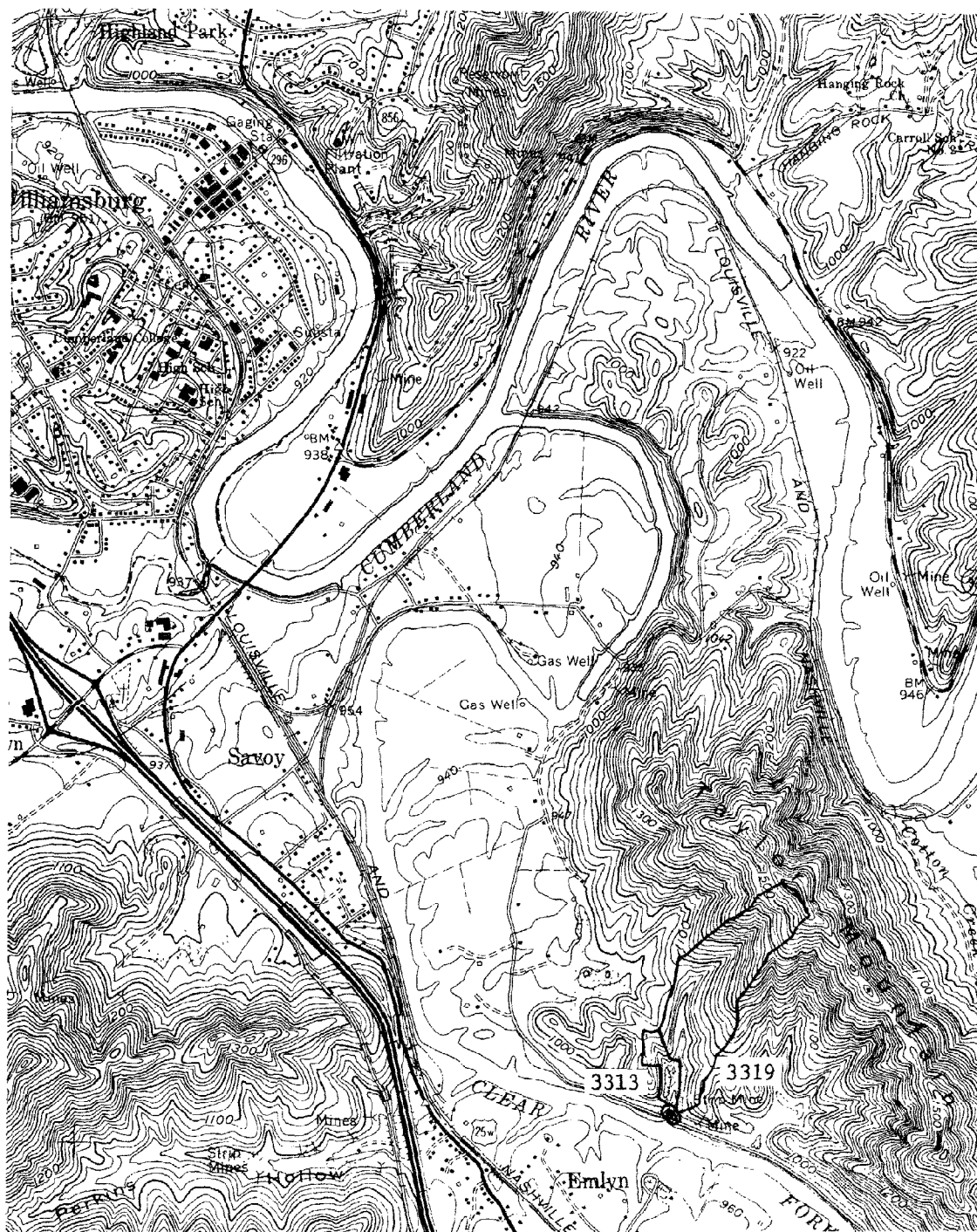


Figure 73. Location map for sites 3313 and 3319, Whitley Co., Kentucky. Williamsburg Quadrangle.



Figure 74. Location map for sites 3315 and 3316, Whitley Co., Kentucky.
Williamsburg Quadrangle.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ^{1/}	Site Name
3011	Bell	Unmined	36°43'43"	83°44'53"	31	0	Tributary to Clear Creek near Clear Creek Springs.
3012	Bell	1950-1979	36 35 24	83 46 43	379	20	Shade Branch at Yellow Creek.
3013	Bell	1950-1955 ^{2/}	36 38 23	83 43 32	223	5	Tributary to Fourmile Run at Binghamtown.
3021	Boyd	Unmined	38 19 13	82 42 51	81	0	Tributary to East Fork Little Sandy River near Alley.
3022	Boyd	1975-1977	38 24 07	82 45 10	89	30	Tributary to Williams Creek near Princess.
3023	Boyd	Before 1960	38 18 43	82 44 32	112	18	Tributary to Fourmile Creek near Garner.
3031	Breathitt	Unmined	37 31 49	83 19 34	116	0	Tributary to S. Fork Quicksand Creek at Rehoboth Mt. Mission.
3032	Breathitt	1973-1979	37 31 00	83 09 05	130	58	Fourmile Branch near Decoy.
3033	Breathitt	Before 1950	37 32 54	83 03 48	68	12	Tributary to Spring Fork Quicksand Creek near Evanston.
3036	Breathitt	Before 1972	37 30 49	83 10 31	70	68	Tributary to South Fork Quicksand Creek near Lunah.
3041	Carter	Unmined	38 19 28	82 53 58	93	0	Tributary to Upper Stinson Creek near Stinson.
3042	Carter	1975-1976	38 20 03	83 05 14	30	55	Tributary to Box Canyon near Counts Crossroads.
3043	Carter	1971-1972	38 19 23	82 53 34	42	23	Tributary to Upper Stinson Creek near Stinson.
3044	Carter	Unmined	38 20 11	83 05 35	37	0	Tributary to Box Canyon near Counts Crossroads.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ^{1/}	Site Name
3051	Clay	Unmined	37°15'14"	83°35'52"	108	0	Collins Branch near Brutus.
3052	Clay	1977-1978	37 14 36	83 33 11	280	28	Barger Branch near Brutus.
3053	Clay	1968	37 16 33	83 51 53	20	32	Tributary to Huckleberry Branch at Shepherdstown.
3054	Clay	Unmined	37 15 06	83 50 26	80	0	Tributary to Bray Creek near Burning Springs.
3056	Clay	1968	37 16 34	83 51 53	7	20	Tributary to Huckleberry Branch at Shepherdstown.
3061	Clinton	Unmined	36 44 58	85 05 12	127	0	Tributary to Williams Creek at Cartwright.
3062	Clinton	1973	36 44 37	85 03 19	131	16	Tributary to an unnamed depression near Nora.
3063	Clinton	1970-1971	36 42 35	85 01 54	209	7	Tributary to Duvall Creek near Savage.
3071	Elliot	Unmined	38 10 01	82 57 14	66	0	Tributary to Brushy Creek near Dobbins.
3072	Elliot	1977-1979	38 10 02	82 57 43	62	70	Tributary to Little Brushy Creek near Dobbins.
3073	Elliot	1972	38 09 38	82 58 08	20	40	Tributary to Brushy Creek near Stephens.
3081	Floyd	Unmined	37 35 51	82 40 53	124	0	Tributary to Levisa Fork Big Sandy River at Ivel.
3082	Floyd	1973	37 35 41	82 39 33	284	30	Dropping Lick Branch at Ivel.
3083	Floyd	Before 1972	37 36 14	82 39 15	239	30	Kinney Branch near Ivel.
3090	Greenup	1970-1975	38 24 45	82 48 30	164	79	Tributary to Brush Creek near Hunnewell.
3091	Greenup	Unmined	38 25 56	82 47 21	131	0	Skillet Handle Branch near Naples.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ^{1/}	Site Name
3092	Greenup	1976-1978	38°24'48"	82°48'23"	22	87	Tributary to Brush Creek near Hunnewell.
3093	Greenup	1970-1971	38 24 44	82 48 34	80	70	Tributary to Brush Creek near Hunnewell.
3094	Greenup	Unmined	38 26 04	82 47 41	38	0	Skillet Handle Branch near Naples.
3095	Greenup	1970-1979	38 24 44	82 48 34	80	75	Tributary to Brush Creek near Hunnewell.
3098	Greenup	1974-1979 ^{2/}	38 24 45	82 48 35	31	98	Tributary to Brush Creek near Hunnewell.
3099	Greenup	1948-1960	38 24 45	82 48 11	582	27	Brush Creek near Hunnewell.
3101	Harlan	Unmined	36 44 30	83 13 15	438	0	Troublesome Creek near Hubbard Springs.
3102	Harlan	1974-1978	36 47 53	83 08 56	315	27	Laurel Branch near Cranks.
3103	Harlan	Before 1970	36 43 10	83 19 16	89	9	Jones Branch at Martins Fork.
3106	Harlan	Before 1972	36 46 55	83 09 34	415	14	Skidmore Branch near Cranks.
3111	Jackson	Unmined	37 17 06	83 54 25	58	0	Tributary to Sexton Creek.
3112	Jackson	1977	37 28 15	84 05 19	56	40	Tributary to Lick Branch at Sand Gap.
3114	Jackson	Unmined	37 17 20	83 53 33	50	0	Tributary to Sexton Creek.
3121	Johnson	Unmined	37 47 26	82 48 55	30	0	Tributary to Burnt Cabin Branch near Hagerhill.
3122	Johnson	1972-1975	37 50 22	82 46 16	62	60	Long Branch at Tutor Key.
3124	Johnson	Unmined	37 47 43	82 48 50	51	0	Burnt Cabin Branch near Hagerhill.
3125	Johnson	1975-1979	37 45 52	82 51 49	104	15	Tributary to Jennys Creek at Leander.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ¹	Site Name
3131	Knott	Unmined	37°24'34"	82°58'04"	112	0	Board Tree Hollow (Trib. to Mill Branch) at Yellow Mountain.
3132	Knott	1975-1976	37 20 30	83 02 45	99	19	Tributary to Troublesome Creek.
3133	Knott	1955	37 16 47	83 06 41	223	32	Jacks Branch at Cordia.
3141	Knox	Unmined	36 47 07	83 54 57	171	0	Powers Branch at Bryants Store.
3142	Knox	1976-1977	36 47 21	83 56 12	52	35	Tributary to Poplar Creek.
3143	Knox	Before 1964	36 46 46	83 51 15	179	7	Tributary to Little Brush Creek near Warren.
3145	Knox	1972-1975	36 47 00	83 55 08	213	1	Powers Branch at Bryants Store.
3151	Laurel	Unmined	37 11 04	84 05 50	136	0	Little Raccoon Creek near East Bernstadt.
3152	Laurel	1977	37 10 54	83 57 49	31	25	Tributary to Rockcastle River at Langnau.
3153	Laurel	1950-1955	37 11 16	84 04 15	52	19	Tributary to Slate Lick near East Bernstadt.
3156	Laurel	1950-1955	37 10 55	84 04 40	106	5	Tributary to Slate Lick near East Bernstadt.
3159	Laurel	Before 1951	37 13 23	84 04 22	46	34	Tributary to Little Raccoon Creek.
3161	Lawrence	Unmined	38 03 31	82 41 48	29	0	Trib. to Right Fork Little Blaine Cr. at Evergreen.
3162	Lawrence	1974-1975	38 03 14	82 42 12	103	43	Beech Hollow at Adams.
3163	Lawrence	1971	38 02 22	82 42 23	163	16	Trib. to Right Fork Little Blaine Cr. at Ledocio.
3164	Lawrence	Unmined	38 03 25	82 41 54	102	0	Trib. to Right Fork Little Blaine Cr. at Adams.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ¹ / _L	Site Name
3165	Lawrence	1971-1979	38°02'22"	82°42'23"	163	17	Trib. to Right Fork Little Blaine Cr. at Ledocio.
3166	Lawrence	1971	38 02 20	82 42 18	101	20	Trib. to Right Fork Little Blaine Cr. at Ledocio.
3167	Lawrence	Unmined	38 00 51	82 48 14	124	0	Straight Branch at Cordell.
3181	Leslie	Unmined	37 01 58	83 21 24	297	0	Lower Bent Branch near Chappell.
3182	Leslie	1975-1977	37 01 14	83 23 36	272	14	Lick Branch near Mozelle.
3183	Leslie	1950-1968	37 09 50	83 29 13	37	7	Tributary to Couch Fork near Jason.
3190	Letcher	1963-1979 ² / _L	37 02 04	83 00 53	181	8	Oldhouse Branch near Defeated Creek.
3191	Letcher	Unmined	37 02 19	83 00 43	263	0	Gibson Branch near Defeated Creek.
3192	Letcher	1974-1975	37 00 24	82 59 28	250	20	Dee Holcomb Branch near Linefork.
3193	Letcher	1955-1962	37 01 57	83 01 34	327	14	Wilson Branch near Defeated Creek.
3201	McCreary	Unmined	36 38 15	84 22 53	75	0	Tributary to Marsh Creek near Creekmore.
3202	McCreary	1977	36 36 37	84 23 01	87	25	Trib. to Trammel Fork Marsh Cr. near Creekmore.
3203	McCreary	1940-1965	36 38 16	84 22 04	208	18	Tributary to Hayes Creek near Creekmore.
3205	McCreary	1957-1977	36 36 37	84 23 02	67	12	Trib. to Trammel Fork Marsh Cr. near Creekmore.
3206	McCreary	1950-1955	36 36 39	84 23 50	64	21	Tributary to Marsh Creek near Creekmore.
3208	McCreary	1957-1979	36 36 38	84 23 02	19	40	Trib. to Trammel Fork Marsh Cr. near Creekmore.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ^{1/}	Site Name
3211	Magoffin	Unmined	37°47'00"	83°01'25"	80	0	Tributary to Round Hole Branch near Falcon.
3212	Magoffin	1977-1978	37 37 41	82 56 45	211	12	Lick Branch at Gapville.
3214	Magoffin	Unmined ^{4/}	37 47 15	83 01 30	49	0	Round Hole Branch (the Middle Fork) at Cyrus.
3221	Martin	Unmined	37 52 01	82 33 00	100	0	Jacks Hollow at Inez.
3222	Martin	1972-1974	37 52 47	82 35 59	160	18	Halls Branch at Stidham.
3223	Martin	1969	37 51 33	82 37 42	29	25	Tributary to Stafford Fork near Tomahawk.
3225	Martin	1976-1977	37 55 56	82 31 54	65	25	Tributary to Petercave Branch at Job.
3241	Morgan	Unmined	37 52 57	83 16 28	77	0	Tributary to Caney Creek near Index.
3242	Morgan	1976-1977	37 57 35	83 00 54	130	18	Tributary to Paint Creek near Moon.
3243	Morgan	1970-1971	37 53 33	83 15 04	17	75	Tributary to Licking River at Gordon Ford.
3246	Morgan	1970-1971	37 53 19	83 14 50	54	30	Tributary to Licking River at Gordon Ford.
3251	Owsley	Unmined ^{5/}	37 24 19	83 40 43	85	0 ^{5/}	Trib. to South Fork Kentucky River near Southfork.
3252	Owsley	1975-1977	37 24 51	83 40 40	303	30	Betty Thomas Branch at Southfork.
3253	Owsley	1955	37 27 39	83 43 11	43	15	Tributary to Buck Creek at Scoville.
3261	Perry	Unmined	37 08 49	83 05 53	182	0	Schoolhouse Branch near Cornettsville.
3262	Perry	1975-1978 ^{2/}	37 21 43	83 08 09	173	15	Tributary to Troublesome Creek at Ary.
3263	Perry	1963-1970 ^{6/}	37 20 45	83 08 15	584	50 ^{6/}	Mill Branch at Dwarf.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed ¹	Site Name
3265	Perry	After 1972	37°23'22"	83°11'25"	830	(15)	Mac and Nellie Branch near Ary.
3268	Perry	After 1972	37 23 10	83 10 05	186	60	Lower Laurel Branch near Stacy.
3271	Pike	Unmined	37 35 25	82 32 06	212	0	Barn Branch near Gulnare.
3272	Pike	1974-1977	37 34 54	82 33 15	164	20	Bear Fork of Caney Fork near Gulnare.
3273	Pike	1964	37 31 58	82 31 13	15	20	Tributary to Stonecoal Creek near Zebulon.
3275	Pike	1974-1975	37 39 36	82 35 04	128	12	Tributary to Johns Creek at McCombs.
3276	Pike	1964	37 32 30	82 31 29	127	10	Tributary to Clevingers Branch near Coal Run.
3278	Pike	1972-1973	37 34 39	82 33 47	90	30	Tributary to Caney Fork near Blair Town.
3279	Pike	1953-1959	37 21 41	82 19 32	75	22	Dog Fork of Ferrell Creek near Mikegrady.
3280	Pulaski	About 1970	37 09 32	84 19 15	161	7	Tributary to Lacey Fork at Squib.
3281	Pulaski	Unmined	37 10 31	84 19 34	53	0	Tributary to Line Creek near Squib.
3282	Pulaski	1976-1978	37 06 51	84 21 14	42	28	Tributary to Lick Creek at Ano.
3283	Pulaski	1961-1967	37 08 23	84 20 00	89	16	Little Clifty Creek near Squib.
3284	Pulaski	Unmined	37 09 59	84 18 47	39	0	Tributary to Line Creek at Billows.
3286	Pulaski	Before 1951	37 08 55	84 19 32	64	27	Tributary to Sugar Camp Branch at Squib.
3289	Pulaski	About 1970	37 09 38	84 18 46	72	10	Tributary to Lacey Fork at Squib.
3291	Rockcastle	Unmined	37 18 50	84 10 47	94	0	Tributary to Trace Branch near Lamero.

TABLE 1. DESCRIPTIVE DATA FOR THE KENTUCKY WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of		Latitude	Longitude	Acres	Percent Disturbed ^{1/}	Site Name
		Surf. Min.						
3292	Rockcastle	1974-1975		37°19'43"	84°10'20"	24	40	Tributary to Trace Branch near Lamer.
3295	Rockcastle	1974-1975		37 19 56	84 10 23	55	18	Tributary to Trace Branch near Lamer.
3298	Rockcastle	1974-1975		37 19 50	84 10 20	20	15	Tributary to Trace Branch near Lamer.
3301	Wayne	Unmined		36 42 05	84 56 17	232	0	Tributary to Otter Creek near Slickford.
3302	Wayne	1973		36 42 38	84 59 48	498	17	Denney Hollow near Powersburg.
3311	Whitley	Unmined		36 37 40	84 13 43	161	0	Tributary to Jellico Creek.
3312	Whitley	1955-1977		36 40 02	84 07 24	187	43	Sawmill Hollow at Mountain Ash.
3313	Whitley	Before 1959		36 42 34	84 08 22	7	30	Tributary to Clear Fork Cumberland River at Emlyn.
3315	Whitley	After 1960		36 42 48	84 14 27	430	3	Hominy Creek near Bon.
3316	Whitley	Before 1951		36 44 11	84 13 04	112	18	Tributary to Becks Creek near Bon.
3319	Whitley	Before 1959		36 42 33	84 08 22	53	8	Tributary to Clear Fork Cumberland River at Emlyn.

^{1/} In almost all instances the percent of land disturbed is based on that shown in aerial photos flown April-June, 1978. The percentage of land disturbed was generally not verified by field observations and so may be subject to appreciable error. Percentages enclosed by parentheses are based on very scanty or questionable information and may be subject to large errors.

^{2/} A large portion of the streamflow is drainage from one or more underground mines.

^{3/} Watershed boundaries for site 3098 are those which temporarily existed in 1979 during reclamation work.

^{4/} Watershed 3214 is unmined but the stream is severely affected by drainage from oil and gas wells.

^{5/} Watershed 3251 may have an old auger mine at the 1050 foot elevation according to faint traces visible on a 1978 aerial photo. This watershed was left in the unmined classification because the water quality shows essentially no impact from mining.

^{6/} Watershed 3263 was heavily impacted by water quality changes induced by massive cuts and fills associated with highway construction. This construction work continued during almost the entire study. The 50 percent disturbed area does not include disturbance from highway construction.

TABLE 2. TYPES OF WATER SAMPLES COLLECTED AT EACH SITE,
VOLUME OF SAMPLE, TREATMENT OF SAMPLE, AND
INCLUSIVE DATES OF COLLECTION

Sample Designation	Volume of Sample (ml)	Treatment/Inclusive Dates of Collection
F	100	Filtered (May 24, 1977 to December 10, 1979)
FA	100	Filtered, acidified with 0.5 ml 50% nitric acid (May 24, 1977 to December 10, 1979)
FN	50	Filtered, acidified with 0.25 ml 50% sulfuric acid (June 26, 1979 to August 6, 1979)
FP	50	Filtered, preserved with 0.25 ml 0.5% mercuric chloride (June 26, 1979 to August 6, 1979)
KJ	100	Unfiltered, acidified with 0.5 ml 50% sulfuric acid (June 26, 1979 to August 6, 1979)
SA	100	Unfiltered, acidified with 0.5 ml 50% nitric acid (Collected May 24, 1977 to about June 1978)
SV	1000	Unfiltered, untreated, raw water (Collected April 10, 1979 to August 3, 1979)
U	100	Unfiltered, untreated, raw water (Collected May 24, 1977 to December 10, 1979)

TABLE 5. WATER QUALITY FOR SITE 3012 BELL COUNTY, KENTUCKY

TABLE 1																TABLE 2							
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
7	1	77	20	0.1			320	353	190	1.24	7.0		20	24	0	0.9	120						
7	28	77	24	0.025			90	338	201	1.30	7.2		20	25	0	0.7	120	0.2					
8	24	77	21	0.15			190	338	199	1.10	6.6		18	22	0	0.7	130	0.7					
9	23	77	17	0.1			60	447	240	1.36	7.1		20	24	0	0.8	150	0.1					
10	26	77	14	2.0			40	225	134	1.19	7.1		17	21	0	0.7	80	0.3					
11	21	77	11	15	835		410	225	175	0.99	7.2		13	16	0	0.7	110	0.5					
12	22	77	3	0.4			2	294	180	1.09	6.7		13	16	0	0.8	120	0.3					
2	2	78	1	3			20	302	220	1.06	7.1		15	18	0	0.6	150	0.8					
3	17	78	3	0.3			15	237	142	1.54	6.7		14	17	0	0.8	82	0.5					
4	11	78	12	0.25			70	228	161	1.49	7.7		19	23	0	1.0	94	0.2					
5	11	78	25	0.3	71*		45	300	143	0.96	7.1		16	19	0	1.8	92	0.3					
6	8	78	17	0.4	527*		750	282	153	1.09	7.1		20	24	0	0.8	93	0.9					
7	17	78	18	0.05	147*		75	381	243	1.34	7.3		25	31	0	1.1	150	0.2					
8	9	78	20	2.0	460*		1100	213	139	1.05	6.7		11	13	0	0.8	82	0.5					
9	21	78	19	0.006	33*		35	395	280	1.13	7.8		34	41	0	0.8	170	1.1					
11	1	78	12	0.006	11		6	422	255	1.29	7.9	-36	37	45	0	0.9	150	0.1					
11	30	78	7	0.05			30	399	255	1.40	7.5		25	30	0	0.7	150	0.2					
1	25	79	0	0.5	9		4	355	235	1.27	7.5		28	34	0	1.4	140	1.3					
3	8	79	5	0.15	363		480	386	271	1.41	7.7		38	46	0	0.9	160	1.2					
4	21	79	14	0.09	44		100	350	247	1.61	7.5	-32	39	47	0	1.0	140	0.5					
5	11	79	15	0.03	73	0.00	150	299	223	1.30	7.9	-27	32	39	0	0.6	140	0.2					
6	6	79	17	0.03	104	0.00	160	324	225	1.35	7.6	-27	32	39	0	0.9	130	0.4					
6	29	79	17	0.01	67	0.10	120	421	239	1.34	8.3	-60	63	75	1	0.8	130	0.2	0.2	0.01	0.95	0.10	0.00
7	29	79	19	0.5	56		25	354	201	1.52	7.7	-23	30	37	0	0.5	110	0.2	0.0	0.01	0.95	0.00	0.01
12	10	79	6	0.2			10	376	243	1.60	7.5	-41	50	61	0	0.7	130	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 1 77	0.1	0.01			25	0.0	0.00	0.2	2.6		20	0.0		2.1	0.00	0.0	2.4		0.0	0.0
7 28 77	0.0	0.01			28	0.0	0.00	0.0	3.0		22	0.1		3.0	0.01	0.1	2.6		0.0	0.0
8 24 77	0.1	0.00			28	0.0	0.00	0.1	3.6		17	0.0		2.5	0.00	0.0	2.2		0.0	0.0
9 23 77	0.1	0.03			37	0.0	0.00	0.2	2.7		27	0.1		2.8	0.02	0.0	3.0		0.0	0.1
10 26 77	0.1	0.01	0.0	0.00	19	0.0	0.00	0.2	2.8	0.06	11	0.0	0.0	1.9	0.01	0.0	3.1	0.0	0.0	0.0
11 21 77	1.7	0.03			22	0.0	0.01	2.4	2.4		13	0.9		1.6	0.03	0.0	5.0		0.1	0.0
12 22 77	0.0	0.00	0.0	0.00	22	0.0	0.00	0.0	1.6	0.15	19	0.0	0.0	1.8	0.01	0.0	2.7	0.1	0.0	0.0
2 2 78	0.1	0.00			26	0.0	0.01	0.0	2.1		23	0.0		2.0	0.01	0.0	2.8		0.0	0.1
3 17 78	0.1	0.01			19	0.0	0.00	0.1	2.0		19	0.1		1.7	0.01	0.0	3.0		0.0	0.0
4 11 78	0.1	0.00	0.0	0.00	22	0.0	0.00	0.1	2.2	0.10	21	0.0	0.0	2.2	0.00	0.0	3.0	0.0	0.0	0.0
5 11 78	0.1	0.00	0.0	0.00	18	0.0	0.03	0.1	1.8	0.09	11	0.0	0.0	1.6	0.01	0.0	2.8	0.0	0.1	0.0
6 8 78	0.1	0.00			20	0.0	0.00	0.2	2.5		13	0.0		2.1	0.00	0.0	2.8		0.0	0.0
7 17 78	0.0	0.01			38	0.0	0.00	0.1	3.0		26	0.0		2.7	0.00	0.0	2.9		0.0	0.0
8 9 78	2.3	0.01			17	0.0	0.01	1.1	2.7		11	0.0		1.3	0.01	0.0	5.8		0.1	0.0
9 21 78	0.1	0.00	0.1	0.00	41	0.0	0.00	0.0	3.7	0.20	23	0.0	0.0	4.1	0.00	0.0	3.1	0.1	0.0	0.0
11 1 78	0.1	0.00			38	0.1	0.02	0.0	3.0		24	0.0		5.7	0.04	0.1	2.4		0.0	0.0
11 30 78	0.2	0.00			48	0.0	0.01	0.1	3.1		24	0.0		2.4	0.02	0.1	2.6		0.1	0.0
1 25 79	0.1	0.00			36	0.0	0.01	0.1	2.4		23	0.1		2.6	0.01	0.0	2.4		0.0	0.2
3 8 79	0.2	0.00			44	0.0	0.02	0.1	3.0		28	0.1		3.0	0.02	0.0	2.5		0.1	0.0
4 21 79	0.1	0.00	0.0	0.00	48	0.0	0.02	0.0	2.7	0.15	25	0.0	0.0	3.2	0.01	0.0	2.1	0.0	0.0	0.0
5 11 79	0.1	0.01			34	0.0	0.00	0.1	2.3		23	0.0		2.3	0.01	0.0	3.0		0.0	0.1
6 6 79	0.2	0.00			35	0.0	0.01	0.2	2.7		23	0.0		2.7	0.01	0.0	2.7		0.1	0.0
6 29 79	0.1	0.00			35	0.0	0.00	0.1	2.8		21	0.0		3.7	0.03	0.1	2.6		0.1	0.0
7 29 79	0.1	0.00			36	0.1	0.08	0.0	2.8		20	0.0		2.1	0.01	0.1	2.7		0.0	0.0
12 10 79	0.0	0.00			42	0.0	0.01	0.0	2.2		27	0.0		2.9	0.01	0.1	2.3		0.1	0.0

TABLE 6. WATER QUALITY FOR SITE 3013 BELL COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
9 23 77	17	0.007			20	126	64	1.72	7.2		16	19	0	0.9	26	0.1					
10 26 77	14	0.4			50	78	59	1.76	7.1		15	18	0	1.2	23	0.1					
11 21 77	11	1.5	43		35	91	62	1.79	7.0		15	18	0	1.1	25	0.1					
12 22 77	4	0.07			6	90	54	1.64	6.9		12	15	0	1.0	23	0.0					
2 2 78	2	0.3			10	77	44	2.04	7.1		11	13	0	0.9	16	0.2					
3 17 78	5	0.4			10	69	44	1.53	6.7		11	13	0	2.7	17	0.1					
4 11 78	11	0.1			35	80	56	1.89	7.4		15	18	0	1.5	20	0.1					
5 11 78	24	0.2	122*		50	72	50	1.46	7.2		11	14	0	1.2	21	0.1					
6 8 78	17	0.7	265*		340	80	57	1.55	7.0		11	14	0	0.8	22	0.8					
7 17 78			54*		4	100	62	2.16	7.3		17	21	0	1.0	22	0.1					
8 9 78	21	0.04	53*		60	95	61	2.10	7.0		20	25	0	0.9	20	0.2					
11 30 78	8	0.04	16		30	119	68	1.67	6.9		16	20	0	1.5	29	0.1					
1 25 79	2	0.02	1		8	65	38	1.51	6.3		5	6	0	1.8	16	0.1					
3 8 79	6	0.04	16		20	64	45	1.36	6.8	-5	7	9	0	0.5	21	0.1					
4 21 79	17	0.04	3		50	70	55	1.54	7.4	-8	11	14	0	1.1	23	0.1					
5 10 79	14	1.0	2180	3.5	8300	69	63	1.24	7.1		11	13	0	1.3	25	0.2					
6 7 79	16	0.03	27		60	75	55	1.55	6.3	-4	18	22	0	1.2	20	0.1					
6 29 79	19	0.01	10		10	102	63	2.21	7.3	-15	21	26	0	1.0	22	0.1	0.0	0.17	1.20	0.10	0.01
7 29 79	18	0.03	18		30	116	61	2.15	7.0	-17	25	30	0	0.9	20	0.1	0.0	0.09	0.70	0.15	0.00
12 10 79	6	0.1			10	93	56	2.27	7.1	-13	21	26	0	0.9	19	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
----- MILLIGRAMS PER LITER -----																				
9 23 77	0.0	0.01			6.8	0.0	0.00	0.1	1.7		5.3	0.1		3.8	0.02	0.0	4.4		0.0	0.0
10 26 77	0.1	0.03	0.0	0.00	6.3	0.0	0.00	0.2	2.5	0.03	4.6	0.0	0.0	3.1	0.01	0.0	4.0	0.0	0.0	0.0
11 21 77	0.1	0.01			6.5	0.0	0.00	0.2	1.6		6.0	0.2		2.8	0.02	0.0	4.2		0.1	0.0
12 22 77	0.0	0.00	0.0	0.00	5.2	0.0	0.00	0.2	1.2	0.05	5.2	0.1	0.0	2.2	0.01	0.0	3.8	0.0	0.0	0.0
2 2 78	0.2	0.00			4.2	0.0	0.00	0.1	1.2		4.6	0.0		1.9	0.01	0.0	3.8		0.0	0.0
3 17 78	0.1	0.01			3.8	0.0	0.00	0.1	1.0		3.9	0.0		1.7	0.01	0.0	3.4		0.0	0.0
4 11 78	0.1	0.00	0.0	0.00	5.8	0.0	0.00	0.1	1.5	0.05	5.2	0.1	0.0	2.4	0.00	0.0	4.3	0.0	0.0	0.0
5 11 78	0.0	0.00	0.0	0.00	4.4	0.0	0.01	0.1	1.3	0.05	4.2	0.0	0.0	2.0	0.01	0.0	3.9	0.0	0.0	0.0
6 8 78	0.1	0.00			5.1	0.0	0.00	0.2	1.8		4.9	0.1		2.4	0.00	0.0	3.8		0.0	0.0
7 17 78	0.0	0.02			7.5	0.0	0.00	0.1	1.9		6.0	0.0		3.0	0.00	0.0	4.4		0.0	0.0
8 9 78	0.1	0.01			6.8	0.0	0.01	0.2	1.8		5.3	0.0		2.2	0.01	0.0	4.6		0.0	0.0
11 30 78	0.1	0.00			7.6	0.0	0.01	0.1	1.8		5.9	0.0		3.0	0.03	0.0	4.0		0.0	0.0
1 25 79	0.1	0.00			3.8	0.0	0.01	0.1	1.0		3.4	0.0		1.4	0.02	0.0	3.3		0.0	0.2
3 8 79	0.1	0.00	0.0	0.00	4.2	0.0	0.00	0.1	1.2	0.20	3.8	0.0	0.0	1.4	0.01	0.0	3.4	0.0	0.0	0.0
4 21 79	0.0	0.00	0.0	0.00	4.8	0.0	0.01	0.1	1.7	0.04	4.6	0.0	0.0	2.7	0.01	0.0	4.3	0.0	0.1	0.1
5 10 79	1.6	0.00			4.5	0.1	0.03	1.3	2.2		4.1	0.0		1.9	0.04	0.0	6.0		0.2	0.1
6 7 79	0.2	0.01			4.9	0.0	0.01	0.3	1.5		3.9	0.0		1.9	0.00	0.0	4.6		0.0	0.1
6 29 79	0.0	0.01			7.8	0.0	0.01	0.1	1.6		5.9	0.0		2.7	0.00	0.0	4.2		0.1	0.0
7 29 79	0.0	0.00			6.8	0.0	0.02	0.1	1.5		5.5	0.1		2.1	0.01	0.0	4.1		0.0	0.0
12 10 79	0.0	0.00			6.6	0.0	0.00	0.1	1.2		5.4	0.1		2.3	0.01	0.0	3.5		0.0	0.0

TABLE 7. WATER QUALITY FOR SITE 3021 BOYD COUNTY, KENTUCKY

																NO3						TOT		TOT		ORTH
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	MCOD3	CD3	CL	SO4	AS N	AS N	NH3 AS N	N	P	P04				
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----																
9	16	77	26	0.001			8	309	186	1.37	6.8		37	45	0	1.8	100		0.0							
10	6	77	18	0.015	10			242	153	1.79	6.7		33	40	0	1.2	73		0.0							
11	17	77	11	0.02	40		8	288	180	1.45	6.5		26	32	0	1.3	99		0.1							
12	27	77	0	0.04	2		8	277	169	1.23	7.2		30	37	0	1.9	96		0.1							
2	3	78	0				20	212	124	1.35	7.3		20	24	0	1.6	68		0.0							
3	9	78	4	0.7	377		600	139	79	1.59	6.8		15	18	0	1.3	37		0.3							
4	3	78	17	0.06	6		8	231	135	1.44	6.7		24	29	0	1.7	70		0.1							
5	1	78	18	0.07	28*		40	226	137	1.24	7.3		24	29	0	1.4	76		0.1							
5	23	78	18	0.15	109*		200	251	125	1.78	7.8		36	44	0	1.6	54		0.3							
6	27	78	30	0.0000	78*		110	348	201	1.80	7.8		58	70	0	3.9	90		0.1							
7	25	78	24	0.007	69*		40	496	341	1.59	8.2		69	82	1	3.8	180		0.1							
11	21	78	12	0.003	3		7	321	212	1.36	7.7	-36	36	44	0	1.5	120		0.0							
1	8	79	1	0.04	36		15	132	80	1.40	6.8		11	13	0	1.3	41		0.2							
2	1	79	0	0.04	8		5	187	115	1.63	6.9		17	21	0	1.2	58		0.0							
3	6	79	11	0.06	2		20	183	118	1.18	7.1	-12	14	17	0	1.2	69		0.1							
4	11	79	10	0.09	12	0.00	15	174	108	1.52	7.3		19	23	0	1.0	55		0.0							
5	24	79	15	0.03	20		85	224	135	1.38	7.5	-19	24	29	0	1.0	72		0.2							
6	28	79	20	0.002	9		15	240	143	1.66	7.9	-30	39	47	0	1.5	67	0.0	0.0	0.01	1.10	0.05	0.00			
8	1	79	28	0.04	8		45	217	134	1.28	7.7	-26	30	36	0	1.2	68	0.0	0.0	0.01	0.50	0.00	0.00			

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
9 16 77	0.0	0.02			28	0.0	0.00	0.1	4.0		11	0.6		11	0.00	0.0	3.1		0.0	0.0
10 6 77	0.0	0.04	0.0	0.00	26	0.0	0.00	0.1	2.7	0.07	11	0.2	0.0	12	0.01	0.0	3.5	0.1	0.1	0.0
11 17 77	0.0	0.03			27	0.0	0.00	0.1	2.2		13	0.3		12	0.03	0.1	3.7		0.2	0.0
12 27 77	0.1	0.00			23	0.0	0.00	0.1	1.8		11	0.0		9.7	0.02	0.0	3.4		0.2	0.0
2 3 78	0.1	0.00	0.0	0.00	17	0.1	0.00	0.1	1.6	0.30	8.7	0.0	0.0	7.8	0.03	0.1	3.1	0.1	0.4	0.0
3 9 78	0.3	0.03			11	0.0	0.00	0.3	1.6		5.7	0.0		4.8	0.00	0.0	3.3		0.0	0.0
4 3 78	0.1	0.01	0.0	0.00	19	0.0	0.03	0.1	2.1	0.08	9.5	0.1	0.0	8.3	0.02	0.0	3.9	0.1	0.2	0.0
5 1 78	0.1	0.01			18	0.0	0.00	0.1	2.1		8.4	0.0		8.3	0.00	0.0	3.8		0.0	0.0
5 23 78	0.2	0.02			18	0.0	0.00	0.3	2.3		9.4	0.3		7.7	0.01	0.0	3.3		0.1	0.0
6 27 78	0.1	0.03			26	0.0	0.00	0.2	6.1		19	1.8		9.7	0.01	0.0	4.1		0.1	0.0
7 25 78	0.1	0.04	0.1	0.00	57	0.0	0.01	0.2	7.2	0.15	25	0.7	0.0	20	0.02	0.1	3.2	0.2	0.0	0.0
11 21 78	0.1	0.00			34	0.0	0.00	0.1	2.4		15	0.2		11	0.01	0.0	3.2		0.1	0.0
1 8 79	0.1	0.00	0.0	0.01	12	0.0	0.00	0.1	1.5	0.15	5.0	0.0	0.0	4.5	0.02	0.0	3.2	0.0	0.1	0.0
2 1 79	0.1	0.01	0.0	0.00	20	0.1	0.01	0.1	2.2	0.08	8.3	0.1	0.0	6.1	0.06	0.1	3.9	0.1	0.2	0.0
3 6 79	0.1	0.00			17	0.0	0.00	0.0	2.1		7.0	0.1		6.1	0.02	0.0	3.5		0.0	0.0
4 11 79	0.1	0.00	0.0	0.00	17	0.0	0.00	0.1	1.9	0.15	7.4	0.0	0.0	6.4	0.01	0.0	3.4	0.1	0.0	0.0
5 24 79	0.2	0.01			20	0.0	0.00	0.1	2.0		9.0	0.2		7.1	0.00	0.0	3.6		0.0	0.0
6 28 79	0.1	0.02			23	0.0	0.01	0.1	2.8		9.3	0.4		8.1	0.00	0.0	3.5		0.0	0.2
8 1 79	0.1	0.01	0.4	0.00	18	0.0	0.02	0.1	2.4	1.5	7.4	0.1	0.0	6.8	0.00	0.0	4.7	0.1	0.0	0.0

TABLE 8. WATER QUALITY FOR SITE 3022 BOYD COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIG SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER														
9 16 77	24	0.0015			15	1240	941	0.87	6.5			12	15	0	2.2	700	0.1					
10 6 77	14	0.4	115		30	752	538	1.37	7.1			39	47	0	1.9	330	0.9					
11 17 77	10	0.01	34		40	288	185	1.54	6.2			33	40	0	9.0	86	0.3					
12 27 77	0	0.04	16		8	485	343	1.04	7.0			36	44	0	2.1	210	3.1					
2 3 78	1	0.06			110	676	413	1.54	7.4			25	31	0	1.8	250	1.5					
3 9 78	2	0.15			80	471	320	1.37	7.1			24	29	0	3.7	190	1.4					
4 3 78	17	0.07	12		4	572	393	1.24	6.6			13	16	0	1.7	250	1.4					
5 1 78	19	0.04	34*		55	465	288	1.26	7.3			16	19	0	1.4	180	1.7					
5 23 78	23	0.15	54*		65	444	269	1.22	7.6			20	24	0	1.1	170	1.1					
6 27 78	27	0.003				704	477	1.40	7.5			44	54	0	2.2	290	1.0					
7 25 78	26	0.04	81*		35	752	527	1.31	8.0			52	62	0	4.1	320	0.9					
8 24 78	22	0.0002	38*		6	799	543	1.07	7.6			34	42	0	1.5	370	0.2					
10 11 78	19	0.002	27*		20	770	645		7.9			51	61	0		430	0.4					
11 21 78	13	0.02	7		8	638	461	1.20	7.4	-43		41	50	0	1.5	290	1.9					
1 8 79	2	0.1	14		20	367	257	1.15	7.3			10	12	0	1.3	160	1.4					
2 1 79	0	0.05	10		2	381	260	1.42	7.5	-21		23	28	0	1.2	150	1.2					
3 6 79	12	0.04	30		35	484	336	1.41	7.7	-32		37	45	0	0.9	200	1.3					
4 11 79	10	0.1	18	0.00	10	602	423	1.26	7.7	-34		39	47	0	2.2	260	1.1					
5 25 79	15	0.09	45		50	666	438	1.07	7.6	-27		32	39	0	2.3	290	1.6					
6 28 79	20	0.004	44		160	339	234	1.03	7.5	-30		34	42	0	1.6	140	1.2	0.2	0.06	1.85	0.20	0.00
8 1 79	26	0.03	11	0.11	55	470	280	1.35	7.8	-36		42	51	0	1.9	160	1.7	0.3	0.08	1.10	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 16 77	0.1	0.06			120	0.0	0.00	0.1	6.3		57	2.1		39	0.05	0.0	4.3		0.0	0.1
10 6 77	0.2	0.09	0.0	0.00	110	0.0	0.02	0.2	5.4	0.20	41	0.9	0.0	17	0.04	0.1	1.8	0.7	0.2	0.0
11 17 77	0.0	0.05			27	0.0	0.00	0.3	5.4		13	2.5		12	0.02	0.0	4.0		0.0	0.0
12 27 77	0.1	0.02			44	0.0	0.00	0.1	3.8		25	1.1		12	0.05	0.0	2.8		0.2	0.0
2 3 78	0.2	0.02	0.0	0.00	69	0.2	0.00	0.2	3.5	0.60	47	1.3	0.0	15	0.07	0.1	2.2	0.6	0.5	0.1
3 9 78	0.1	0.05			50	0.0	0.00	0.2	3.0		32	0.9		11	0.04	0.0	2.8		0.1	0.0
4 3 78	0.1	0.04	0.0	0.00	60	0.0	0.01	0.2	3.2	0.20	35	0.9	0.0	16	0.06	0.0	3.2	0.5	0.2	0.1
5 1 78	0.1	0.04			44	0.0	0.00	0.1	3.6		25	0.5		12	0.02	0.0	2.2		0.0	0.2
5 23 78	0.1	0.05			34	0.0	0.00	0.2	3.2		27	0.4		10	0.03	0.1	2.0		0.2	0.0
6 27 78	0.1	0.10			86	0.0	0.01	0.1	7.3		40	0.6		18	0.03	0.1	0.5		0.1	0.0
7 25 78	0.2	0.11	0.0	0.00	91	0.0	0.01	0.1	8.6	0.20	41	0.3	0.1	21	0.03	0.1	0.6	0.9	0.1	0.0
8 24 78	0.3	0.13			81	0.0	0.01	0.2	8.4		40	1.0		17	0.03	0.3	1.3		0.1	0.1
10 11 78	0.4	0.13	0.0	0.00	100	0.0	0.01	0.1	9.1	0.30	49	0.1	0.0	22	0.03	0.2	0.5	1.2	0.3	0.0
11 21 78	0.3	0.06			84	0.0	0.01	0.1	6.7		31	0.7		12	0.03	0.1	1.0		0.2	0.1
1 8 79	0.1	0.03	0.1	0.00	43	0.0	0.01	0.1	3.0	0.45	19	0.3	0.0	7.1	0.05	0.1	2.9	0.4	0.2	0.1
2 1 79	0.1	0.02	0.0	0.00	47	0.0	0.00	0.1	2.8	0.20	23	0.4	0.0	7.5	0.01	0.1	2.2	0.3	0.1	0.0
3 6 79	0.1	0.04			61	0.0	0.01	0.0	3.6		29	0.3		10	0.01	0.0	1.9		0.1	0.0
4 11 79	0.1	0.05			72	0.0	0.00	0.0	4.2		33	0.3		16	0.02	0.0	1.3		0.0	0.0
5 25 79	0.5	0.06			69	0.0	0.01	0.0	4.7		31	0.2		13	0.01	0.0	1.2		0.1	0.0
6 28 79	0.2	0.05			36	0.0	0.01	0.1	3.4		12	0.2		6.6	0.01	0.0	2.1		0.0	0.0
8 1 79	0.1	0.07	0.0	0.00	46	0.0	0.03	0.0	4.6	0.20	21	0.1	0.0	11	0.01	0.0	2.1	0.3	0.0	0.0

TABLE 9. WATER QUALITY FOR SITE 3023 BOYD COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
9	16	77	21	0.015			15	632	389	0.93	3.5		0	0	0	1.1	260	0.0					
10	6	77			0		15	508	352	1.01	3.7		0	0	0	1.4	230	0.0					
11	17	77	9	0.1	29		4	550	414	0.83	3.6		0	0	0	1.4	280	0.1					
12	27	77	0	0.1	5		6	599	407	0.97	4.0		0	0	0	1.8	270	0.1					
2	3	78	1	0.6			10	815	561	0.86	3.6		0	0	0	1.4	390	0.1					
3	9	78	6	0.5			70	453	292	0.93	3.7		0	0	0	1.1	200	0.2					
4	3	78	17	0.3	4		4	619	416	0.93	3.9		0	0	0	1.2	290	0.1					
5	1	78	16	0.07	11		3	524	344	0.78	3.6		0	0	0	0.8	240	0.1					
5	23	78	16	0.4	337*		600	534	364	0.86	4.4		0	0	0	1.3	250	0.2					
6	27	78	21	0.15	49*		40	790	493	0.84	3.5		0	0	0	1.4	340	0.0					
7	25	78	24	0.15	48*		45	794	479	0.87	3.4		0	0	0	1.6	320	0.0					
8	24	78	22	0.003	42*		15	680	465	0.74	3.4		0	0	0	1.9	330	0.1					
10	11	78	18	0.02	41*		8	685	529	0.83	3.6		0	0	0	2.1	370	0.1					
11	21	78	12	0.015	10		1	632	465	0.84	3.7	52	0	0	0	1.2	320	0.0					
1	8	79	3	0.3	18		5	1010	678	0.58	3.1		0	0	0	7.1	500	0.5					
2	1	79	2	0.3	10		3	1460	1040	0.63	3.0	430	0	0	0	0.9	770	0.1					
3	6	79	10	0.15	11		4	1470	1270	0.47	3.2	460	0	0	0	1.4	1000	0.2					
4	11	79	11	0.15	7	0.00	1	697	514	0.63	3.4		0	0	0	1.0	390	0.1					
5	24	79	15	0.2	14		5	539	394	0.74	3.6	76	0	0	0	0.7	280	0.1					
6	28	79	18	0.01	10		8	772	599	0.64	3.3	120	0	0	0	1.1	450	0.1	0.0	0.03	0.90	0.05	0.00
8	1	79	28	0.15	3	0.01	20	749	368	0.79	3.5	90	0	0	0	1.2	250	0.1	0.0	0.03	0.75	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 16 77	3.8	0.15			34	0.1	0.00	1.8	5.3		27	6.2		23	0.09	0.0	12		0.0	0.1
10 6 77	3.6	0.09	0.0	0.00	34	0.1	0.00	2.0	4.6	0.15	28	4.1	0.0	18	0.10	0.0	12	0.3	0.1	0.1
11 17 77	5.5	0.06			36	0.1	0.01	1.3	5.0		25	5.8		22	0.10	0.0	12		0.1	0.1
12 27 77	9.2	0.05			38	0.1	0.00	1.0	4.5		31	3.9		22	0.10	0.0	11		0.2	0.1
2 3 78	25	0.05	0.0	0.01	53	0.2	0.01	1.7	3.9	0.30	43	3.8	0.1	16	0.23	0.1	11	0.6	0.3	0.3
3 9 78	8.3	0.07			24	0.1	0.01	0.8	3.1		27	1.8		10	0.11	0.0	7.2		0.0	0.2
4 3 78	4.7	0.07	0.0	0.01	43	0.1	0.01	0.9	4.1	0.20	33	2.5	0.0	16	0.19	0.0	10	0.3	0.1	0.2
5 1 78	9.8	0.07			27	0.1	0.01	0.8	3.6		23	1.8		13	0.14	0.0	10		0.1	0.2
5 23 78	9.1	0.08			33	0.1	0.01	0.9	3.3		28	2.4		12	0.13	0.0	9.0		0.1	0.2
6 27 78	9.8	0.11			42	0.1	0.01	2.8	4.5		34	4.9		22	0.17	0.0	13		0.1	0.2
7 25 78	7.7	0.12	0.0	0.00	42	0.1	0.02	6.4	5.9	0.15	31	5.1	0.0	23	0.17	0.1	14	0.3	0.1	0.2
8 24 78	4.5	0.11			38	0.1	0.01	2.3	4.6		28	4.4		19	0.14	0.2	13		0.1	0.2
10 11 78	7.5	0.08	0.0	0.00	46	0.1	0.01	2.7	5.1	0.20	34	7.5	0.0	27	0.14	0.1	13	0.4	0.2	0.1
11 21 78	7.2	0.08			44	0.1	0.01	0.9	4.3		28	5.5		25	0.13	0.1	12		0.1	0.2
1 8 79	33	0.04	0.0	0.01	45	0.2	0.03	8.3	2.2	0.50	40	3.4	0.0	15	0.40	0.0	9.2	0.4	0.1	0.6
2 1 79	59	0.09	0.0	0.01	65	0.4	0.04	14	2.3	0.35	71	6.1	0.0	21	0.66	0.1	12	0.4	0.3	1.0
3 6 79	68	0.09			68	0.4	0.04	8.8	2.5		67	5.5		20	0.72	0.1	12		0.2	1.0
4 11 79	18	0.04			36	0.2	0.02	2.8	2.4		34	2.2		11	0.24	0.0	7.9		0.1	0.3
5 24 79	12	0.05			35	0.1	0.01	1.1	3.3		24	1.9		13	0.16	0.0	10		0.0	0.2
6 28 79	20	0.09			50	0.1	0.02	1.8	2.9		35	3.4		13	0.21	0.0	11		0.0	0.4
8 1 79	13	0.07	0.1	0.01	24	0.1	0.05	1.9	3.4	0.15	28	2.2	0.0	12	0.21	0.0	12	0.1	0.1	0.5

TABLE 10. WATER QUALITY FOR SITE 3031 BREATHITT COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
5 25 77	15	0.02			15		55	2.58	6.8		25	31	0	2.2	14	0.3					
6 27 77	20	0.006			55	188	74	3.52	7.6		43	53	0	0.8	16	0.6					
7 25 77	24	0.06			0	154	66	3.24	7.4		34	41	0	1.5	16	0.0					
8 22 77	21	0.05			8	63	42	2.10	6.3		11	13	0	0.7	13	0.1					
9 26 77	20	0.03			30	80	49	2.91	6.9		16	20	0	1.2	12	0.3					
10 31 77	14	0.02	10		0	99	52	2.22	7.0		16	20	0	1.5	16	0.1					
11 25 77	7	0.3	27		8	65	40	1.63	6.7		9	11	0	0.8	16	0.1					
12 19 77	6	0.05			6	55	37	1.61	6.8		7	8	0	0.8	14	0.0					
3 6 78	6	0.06			10	54	35	1.57	6.9		7	9	0	1.0	14	0.1					
4 17 78	12	0.09	66*		0	63	39	1.62	6.9		7	9	0	1.3	14	0.4					
5 13 78	16	0.4	18*		9	56	40	1.18	7.0		6	7	0	3.2	13	0.8					
6 15 78	13	0.015				114	48	2.33	7.6		19	23	0	1.6	12	0.3					
7 13 78	20	0.0025			4	82	50	3.04	7.4		16	20	0	1.1	12	0.3					
8 14 78	21	0.1	37*		10	56	40	2.11	6.9		10	12	0	1.1	12	0.2					
9 28 78	17	0.0001	11		4	174	106	7.48	8.0		70	85	0	2.6	11	0.1					
11 6 78	15	0.0002	19		20	148	97	5.03	8.1		54	65	0	3.4	15	0.0					
12 6 78	7	0.02	3		5	54	36	1.63	6.8		8	10	0	1.0	12	0.2					
2 14 79	0	0.15	9		2	47	25	1.51	8.0	-1	5	6	0	0.4	10	0.0					
3 14 79	6	0.4	4		3	43	34	1.43	7.0	-1	5	6	0	0.6	14	0.0					
4 18 79	7	0.4	4		30	44	34	1.29	7.0	-1	7	9	0	0.7	14	0.1					
5 14 79	18	0.05	2		15	52	40	1.73	7.2	-2	8	10	0	0.7	15	0.1					
6 18 79	16	0.05	47		35	71	54	2.36	7.3	-4	17	21	0	1.4	14	0.3					
7 17 79	22	0.04	30*		25	67	46	1.92	7.2		16	19	0	1.2	14	0.3	0.0	0.01	0.65	0.20	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 25 77	0.0	0.00			5.5	0.0	0.01	0.0	1.6		4.0	0.0		3.6	0.02	0.0	3.4		0.0	0.0
6 27 77	0.1	0.00			14	0.0	0.00	0.0	1.7		5.0	0.0		2.3	0.00	0.0	2.6		0.0	0.0
7 25 77	0.0	0.01			9.1	0.0	0.01	0.1	2.6		5.4	0.1		3.5	0.01	0.1	3.4		0.0	0.0
8 22 77	0.1				4.7	0.0	0.00	0.1	1.4		2.6	0.0		2.5	0.01	0.0	4.8		0.0	0.1
9 26 77	0.0	0.03			6.7	0.0	0.00	0.1	2.1		3.4	0.0		2.7	0.03	0.0	4.4		0.0	0.1
10 31 77	0.0	0.00	0.0	0.00	6.8	0.0	0.00	0.1	1.7	0.03	3.4	0.0	0.0	3.0	0.00	0.0	4.0	0.0	0.0	0.0
11 25 77	0.0	0.00			3.9	0.0	0.01	0.1	1.4		2.4	0.0		2.9	0.01	0.0	3.3		0.0	0.0
12 19 77	0.0	0.00	0.0	0.00	3.4	0.0	0.00	0.1	1.0	0.06	2.6	0.0	0.0	2.2	0.01	0.0	3.8	0.0	0.0	0.0
3 6 78	0.0	0.00			3.3	0.0	0.00	0.1	0.9		2.5	0.0		2.0	0.00	0.0	3.1		0.0	0.0
4 17 78	0.0	0.00	0.0	0.00	3.9	0.0	0.00	0.0	1.4	0.03	2.5	0.0	0.0	2.2	0.00	0.0	3.5	0.0	0.0	0.0
5 13 78	0.1	0.00			3.1	0.0	0.00	0.2	1.0		2.4	0.0		2.1	0.00	0.0	3.7		0.0	0.0
6 15 78	0.0	0.00	0.0	0.00	5.4	0.0	0.00	0.1	1.1	0.01	3.0	0.0	0.0	2.6	0.00	0.0	4.2	0.0	0.0	0.0
7 13 78	0.1	0.01			7.4	0.0	0.00	0.3	1.9		3.5	0.0		2.5	0.00	0.0	4.6		0.0	0.0
8 14 78	0.0	0.00			4.6	0.0	0.01	0.1	2.0		2.3	0.0		2.0	0.01	0.0	4.3		0.0	0.0
9 28 78	0.1	0.01	0.1	0.00	18	0.0	0.00	0.0	4.0	0.15	6.2	0.0	0.0	5.6	0.00	0.0	6.9	0.1	0.0	0.0
11 6 78	0.1	0.00			16	0.0	0.01	0.1	4.5		5.3	0.0		6.2	0.02	0.0	6.3		0.0	0.0
12 6 78	0.1	0.00			4.0	0.0	0.01	0.0	1.3		1.9	0.0		1.8	0.01	0.0	3.5		0.0	0.0
2 14 79	0.0	0.00	0.0	0.00	2.9	0.0	0.00	0.0	0.5	0.07	1.7	0.0	0.0	1.0	0.00	0.0	2.4	0.0	0.0	0.0
3 14 79	0.0	0.01			3.6	0.0	0.02	0.0	1.2		1.9	0.0		1.7	0.02	0.0	3.6		0.0	0.0
4 18 79	0.0	0.00	0.0	0.00	3.1	0.0	0.00	0.0	0.9	0.01	1.8	0.0	0.0	1.6	0.00	0.0	3.3	0.0	0.0	0.0
5 14 79	0.0	0.00			4.6	0.0	0.01	0.0	1.3		2.6	0.0		2.2	0.02	0.0	3.8		0.0	0.0
6 18 79	0.1	0.02			6.2	0.1	0.03	0.1	2.0		3.2	0.0		3.1	0.00	0.1	5.6		0.1	0.3
7 17 79	0.0	0.00	0.0	0.00	5.5	0.0	0.00	0.0	1.7	0.07	2.3	0.0	0.0	2.2	0.00	0.0	3.8	0.0	0.0	0.0

TABLE 11. WATER QUALITY FOR SITE 3032 BREATHITT COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER												
5	24	77	19	0.05			8	377	288	2.36	7.7		147	178	1	2.2	110	0.3				
6	27	77	22	0.08			8	720	429	2.18	8.0		167	201	1	2.3	190					
7	25	77	21	0.06			9	486	265	3.03	8.3		161	191	2	1.5	80	0.1				
8	22	77	22	0.06				518	313	2.88	7.2		148	180	0	1.6	100	1.4				
9	26	77	19	0.07				493	255	3.36	6.4		134	163	0	2.2	75	1.0				
10	31	77	14	0.01	53		8	493	327	3.82	8.2		201	240	2	2.0	86	0.2				
11	25	77	8	0.07	16		15	445	269	2.22	8.6		131	152	4	1.5	100	0.5				
12	19	77	8	0.09			4	500	312	2.91	8.0		147	177	1	1.8	110	0.2				
3	6	78	9	0.1	471		1500	812	564	1.99	8.6		217	251	7	2.1	240	6.7				
4	17	78	18	0.15	27*		4	569	346	2.37	8.5		140	164	3	1.9	130	3.0				
5	13	78	17	0.2	55*		30	616	329	2.47	8.5		140	164	3	2.6	130					
6	15	78	14	0.07				689	441	2.20	8.3		180	213	3	2.0	160	7.5				
7	13	78	20	0.02	106*		65	582	391	1.91	8.5		131	153	3	1.8	170	4.9				
8	14	78	24	0.15	142*		65	814	564	1.71	8.3		125	149	2	1.2	230	20				
9	28	78	17	0.005	18*		4	791	528	1.73	8.3		178	211	3	2.4	230	9.0				
11	6	78	12	0.002	6		3	694	448	1.91	8.3		178	211	3	2.2	190	4.7				
12	6	78	10	0.02	11		8	970	588	2.32	8.0		223	268	2	1.9	240	1.4				
3	21	79	14	0.06	105		1	1000	665	1.74	8.3		174	206	3	1.7	340	2.8				
4	17	79	14	0.3	103		5	989	685	1.65	8.0		177	213	2	1.7	310	16				
5	15	79	20	0.3	124		25	997	704	1.75	8.1		170	203	2	2.2	320	14				
6	18	79	24	0.15	149		85	1020	760	1.63	8.3		144	171	3	2.9	360	17				
7	17	79	22	0.08	26		20	1140	731	1.64	8.5		137	159	4	2.7	350	17	1.8	0.09	0.85	0.00 0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 24 77	0.1	0.01			34	0.0	0.01	0.1	4.9		40	0.5		4.9	0.02	0.0	1.8		0.0	0.0
6 27 77	0.1	0.02			63	0.0	0.00	0.2	7.7		59	0.2		5.6	0.02	0.0	1.3		0.1	0.0
7 25 77	0.1	0.01			35	0.0	0.01	0.0	5.8		37	0.2		4.4	0.02	0.2	2.0		0.0	0.0
8 22 77	0.1	0.04			47	0.0	0.00	0.2	6.8		45	1.7		4.7	0.02	0.0	2.6		0.0	0.0
9 26 77	0.2	0.04			35	0.0	0.00	0.2	5.2		41	1.6		3.9	0.05	0.0	2.8		0.0	0.1
10 31 77	0.1	0.00	0.0	0.00	50	0.0	0.00	0.1	5.5	0.15	50	1.6	0.0	4.7	0.01	0.0	2.2	0.2	0.0	0.0
11 25 77	0.0	0.00			35	0.0	0.00	0.1	5.5		33	2.1		4.6	0.01	0.0	1.8		0.0	0.0
12 19 77	0.7	0.00	0.1	0.00	49	0.0	0.00	0.1	4.7	0.30	47	2.4	0.0	3.7	0.02	0.0	2.3	0.3	0.1	0.0
3 6 78	0.2	0.01			71	0.0	0.01	0.1	9.5		77	0.2		4.5	0.03	0.0	1.6		0.1	0.0
4 17 78	0.1	0.01	0.1	0.00	44	0.0	0.00	0.0	5.7	0.15	53	1.2	0.0	3.9	0.00	0.1	1.9	0.2	0.2	0.0
5 13 78	0.1	0.01			46	0.0	0.00	0.2	6.7		49	1.5		4.4	0.00	0.1	1.8		0.1	0.0
6 15 78	0.1	0.02	0.0	0.00	59	0.0	0.00	0.1	8.5	0.25	57	1.6	0.0	4.8	0.04	0.0	2.2	0.4	0.3	0.0
7 13 78	0.1	0.03			54	0.0	0.00	0.1	8.5		48	1.9		3.8	0.00	0.0	2.7		0.0	0.0
8 14 78	0.2	0.04			83	0.0	0.01	0.1	14		60	0.8		4.9	0.10	0.2	2.4		0.2	0.0
9 28 78	0.2	0.03	0.1	0.00	68	0.0	0.00	0.1	11	0.40	61	0.9	0.0	5.2	0.04	0.1	1.6	0.5	0.1	0.0
11 6 78	0.3	0.02			60	0.0	0.00	0.2	6.6		54	1.1		5.4	0.05	0.1	1.7		0.2	0.0
12 6 78	0.2	0.04			110	0.0	0.01	0.1	13		73	0.8		5.5	0.08	0.2	2.3		0.2	0.0
3 21 79	0.2	0.03			110	0.0	0.10	0.1	10		78	0.5		4.7	0.04	0.1	1.5		0.5	0.0
4 17 79	0.2	0.02	0.1	0.00	110	0.0	0.00	0.1	9.9	0.40	73	0.4	0.1	4.5	0.05	0.1	1.5	0.6	0.3	0.1
5 15 79	0.1	0.02			110	0.0	0.00	0.0	10		82	0.4		5.2	0.03	0.1	1.2		0.2	0.0
6 18 79	0.2	0.04			120	0.0	0.00	0.1	12		88	0.4		6.0	0.03	0.1	1.5		0.4	0.3
7 17 79	0.2	0.04			120	0.0	0.01	0.1	11		84	0.3		5.2	0.00	0.2	1.6		0.3	0.0

TABLE 12. WATER QUALITY FOR SITE 3033 BREATHITT COUNTY, KENTUCKY

WATER		EST	SUSP	SETT	SPEC		DIS	NEUT	LAB	ACID-	ALKA-												
DATE	TEMP	DISCH	SOL	MATTER	TURB	COND	SOLID	RATIO	PH	ITY	LINITY	HC03	CO3	CL	SD4	N03 AS N	N03 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
11	15	77	7	0.04	27		10	118	76	1.16	6.3		15	18	0	0.9	42	0.1					
12	20	77	7	0.15			6	111	78	1.36	7.4		13	16	0	1.1	40	0.0					
1	30	78	1	0.2			20	118	76	1.25	7.0		11	14	0	1.4	41	0.0					
3	2	78	2	0.03			15	120	73	1.20	7.2		12	15	0	1.3	40	0.2					
3	30	78	12	1.0			8	115	69	1.34	6.2		10	12	0	1.9	36	0.0					
4	26	78	10	0.7	377*		170	71	44	1.53	7.0		8	10	0	0.7	19	0.3					
5	18	78	14	0.7	33*		25	116	69	1.22	6.9		8	10	0	0.9	39	0.0					
6	21	78	20	0.006				139	84	1.37	7.1		14	17	0	1.4	43	0.1					
8	22	78	18	0.0008	17*		10	138	87	1.42	7.1		13	16	0	0.3	46	0.1					
11	20	78	12	0.001	6		5	129	70	1.59	7.4		18	22	0	1.4	31	0.0					
1	29	79	2	0.06	6		2	143	82	1.39	7.3	-21	14	17	0	1.8	42	0.2					
3	2	79	8	0.1	3		4	124	83	1.16	6.8	-6	7	9	0	0.6	49	0.2					
3	21	79	11	0.025	18		8	140	91	1.03	7.0	-7	10	12	0	1.0	54	0.4					
4	17	79	13	0.2	23		15	130	85	1.24	7.0	-5	10	12	0	0.8	48	0.2					
5	15	79	17	0.06	5		15	139	89	1.39	7.3		15	18	0	1.0	46	0.5					
6	18	79	18	0.07	16		25	142	86	1.00	7.2	-4	11	14	0	1.1	51	0.0					
7	18	79	21	0.04	27*		50	149	96	1.10	7.2	-9	13	16	0	1.0	56	0.1	0.1	0.04	0.45	0.10	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
11 15 77	0.0	0.00	0.0	0.00	7.0	0.0	0.01	0.0	2.1	0.01	5.7	0.0	0.0	3.6	0.00	0.0	2.8	0.0	0.0	0.0
12 20 77	0.0	0.00	0.0	0.00	7.8	0.0	0.00	0.0	1.9	0.10	7.3	0.0	0.0	3.2	0.01	0.0	3.8	0.1	0.1	0.0
1 30 78	0.1	0.00			7.2	0.1	0.01	0.1	1.8		7.0	0.0		2.9	0.02	0.1	3.4		0.3	0.0
3 2 78	0.1	0.00			6.9	0.0	0.01	0.0	1.6		6.5	0.0		2.9	0.02	0.1	2.5		0.1	0.0
3 30 78	0.0	0.02			7.3	0.0	0.00	0.1	1.6		6.5	0.0		2.6	0.01	0.0	3.3		0.0	0.0
4 26 78	0.1	0.00	0.0	0.00	4.9	0.0	0.00	0.1	1.7	0.04	3.6	0.0	0.0	1.5	0.00	0.0	2.8	0.0	0.1	0.0
5 18 78	0.0	0.01			7.2	0.0	0.00	0.0	1.7		6.1	0.0		2.5	0.00	0.0	3.5		0.0	0.0
6 21 78	0.1	0.00	0.0	0.00	9.2	0.0	0.00	0.1	1.8	0.00	7.6	0.0	0.0	2.9	0.01	0.0	4.4	0.1	0.2	0.0
8 22 78	0.0	0.02			10	0.0	0.01	0.1	2.5		8.2	0.0		2.9	0.02	0.0	4.4		0.1	0.0
11 20 78	0.0	0.00			8.1	0.0	0.01	0.0	2.1		6.3	0.0		2.4	0.01	0.0	3.6		0.1	0.0
1 29 79	0.0	0.00			9.8	0.0	0.00	0.0	1.6		8.3	0.0		1.8	0.03	0.0	3.3		0.0	0.0
3 2 79	0.1	0.00			9.3	0.0	0.00	0.1	1.7		7.6	0.0		2.2	0.01	0.0	3.0		0.0	0.0
3 21 79	0.0	0.00			9.4	0.0	0.00	0.0	1.8		7.5	0.0		2.1	0.01	0.0	3.3		0.0	0.0
4 17 79	0.0	0.00	0.0	0.00	9.5	0.0	0.01	0.0	1.6	0.05	8.2	0.0	0.0	2.2	0.02	0.0	3.3	0.0	0.1	0.0
5 15 79	0.1	0.00			11	0.0	0.00	0.1	1.8		8.2	0.0		2.4	0.01	0.0	3.3		0.1	0.0
6 18 79	0.0	0.00			8.3	0.0	0.01	0.0	1.8		6.6	0.0		2.3	0.01	0.0	3.4		0.0	0.0
7 18 79	0.0	0.01	0.0	0.00	10	0.0	0.00	0.0	1.8	0.09	8.0	0.0	0.0	2.4	0.00	0.0	4.0	0.0	0.0	0.0

TABLE 13. WATER QUALITY FOR SITE 3036 BREATHTT COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
										MILLIGRAMS PER LITER											
7 25 77	22	0.07			0	1230	826	1.59	8.0		180	217	2	10	420	10					
2 14 79	5	0.04				1160	754	2.18	8.1		270	323	3	1.7	310	8.7					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 25 77	0.2	0.02			100	0.0	0.01	0.1	19		110	0.6		7.5	0.04	0.2	1.6		0.0	0.0
2 14 79	0.2	0.01			110	0.0	0.00	0.1	10		110	0.2		4.4	0.06	0.2	1.6		0.5	0.0

TABLE 14. WATER QUALITY FOR SITE 3041 CARTER COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
6 2 77	16	0.007			20	105	63	1.82	7.1			14	17	0	2.2	24					
7 6 77	26	0.003			20	129	73	3.23	7.2			37	45	0	1.6	16	0.1				
8 5 77	22	0.3			10	88	67	1.66	6.7			15	18	0	1.6	26	0.1				
10 6 77	14	0.1	39		4	137	77	2.19	6.8			17	21	0	4.9	24	1.0				
11 17 77	11	0.08	21		15	104	60	1.57	7.1			13	16	0	2.0	25	0.3				
12 27 77	0	0.03	6		8	105	61	1.57	7.1			9	11	0	2.0	28	0.0				
2 3 78	0	0.05			20	89	53	1.54	6.7			6	7	0	1.7	24	0.2				
3 9 78	3	0.6	882		2500	102	62	1.30	6.4			7	9	0	3.2	25	0.8				
4 3 78	13	0.2	4		4	89	60	1.53	6.0			7	9	0	1.6	28	0.2				
5 1 78	17	0.1	26*		25	98	66	1.01	6.5			3	4	0	1.7	33	0.9				
5 23 78	23	0.3	42*		65	86	60	1.26	6.9			8	10	0	1.1	29	0.2				
6 26 78	28	0.002	41*		25	102	62	2.05	7.4			20	24	0	2.2	21	0.1				
7 24 78	24	0.04			2500	87	59	1.58	7.0			8	10	0	2.8	19	1.9				
8 25 78	22	0.0001	42*		10	162	89	3.65	7.8			49	60	0	2.4	21	0.1				
10 11 78	18	0.0001	76*		60	134	80	2.35	7.5			28	34	0	1.7	27	0.1				
11 22 78	11	0.01	4		3	113	66	1.80	7.2	-12		16	19	0	3.4	24	0.5				
1 8 79	4	0.25	22		7	67	51	1.41	6.7			7	9	0	1.6	22	0.3				
2 1 79	0	0.08	11		5	81	47	1.65	6.0	0		6	7	0	1.5	20	0.2				
3 6 79	6	0.04	3		5	83	54	1.26	6.7	-1		5	6	0	1.1	27	0.2				
4 11 79	10	0.2	9	0.00	7	82	54	1.13	6.7			4	5	0	1.2	28	0.1				
5 24 79	14	0.04	12		20	104	61	1.20	7.0	0		6	7	0	3.3	29	0.2				
6 27 79	23	0.02	24		10	100	72	1.35	6.9			11	13	0	5.2	30	0.1 0.0	0.07	1.25	0.05	0.00
8 1 79	25	0.04	8		35	98	64	1.29	7.0	-4		10	12	0	3.1	27	0.1 0.0	0.04	0.65	0.00	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 ms/l too high (most are 20 to 40 ms/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 2 77	0.0	0.01			5.8	0.0	0.00	0.1	2.0		5.7	0.3		2.6	0.04	0.0	5.4		0.0	0.1
7 6 77	0.0	0.01			6.9	0.0	0.00	0.1	2.9		7.0	0.5		3.2	0.00	0.0	5.5		0.0	0.0
8 5 77	0.0	0.02			5.3	0.0	0.00	0.1	2.9		5.9	0.1		3.3	0.01	0.0	5.6		0.0	0.0
10 6 77	0.1	0.04	0.0 0.00		8.0	0.0	0.00	0.2	5.4	0.02	7.0	0.1	0.1	4.2	0.02	0.0	3.7	0.0	0.0	0.0
11 17 77	0.0	0.00			5.3	0.0	0.01	0.0	3.5		4.7	0.0		3.8	0.00	0.0	2.8		0.0	0.0
12 27 77	0.0	0.00			5.4	0.0	0.00	0.1	2.4		6.2	0.1		2.6	0.02	0.0	4.0		0.3	0.0
2 3 78	0.0	0.00	0.0 0.00		4.6	0.0	0.00	0.1	1.7	0.01	5.6	0.1	0.0	2.2	0.00	0.0	3.9	0.0	0.0	0.0
3 9 78	1.0	0.00			4.6	0.0	0.00	0.5	2.6		4.8	0.0		3.1	0.01	0.0	4.5		0.0	0.0
4 3 78	0.1	0.00	0.0 0.00		5.4	0.0	0.01	0.1	2.5	0.05	6.1	0.0	0.0	2.4	0.04	0.0	4.0	0.0	0.1	0.0
5 1 78	0.0	0.01			4.6	0.0	0.00	0.0	2.1		5.2	0.1		2.3	0.01	0.0	4.8		0.0	0.0
5 23 78	0.1	0.02			4.5	0.0	0.00	0.2	1.9		5.3	0.1		2.2	0.01	0.0	4.8		0.1	0.0
6 26 78	0.0	0.02			6.2	0.0	0.00	0.0	3.6		5.5	0.0		2.8	0.01	0.0	3.8		0.0	0.0
7 24 78	0.3	0.03	0.0 0.00		5.3	0.0	0.02	0.4	5.2	0.02	4.1	0.1	0.0	2.4	0.02	0.0	2.8	0.0	0.1	0.0
8 25 78	0.0	0.03			11	0.0	0.00	0.1	4.9		10	1.3		3.7	0.02	0.0	2.2		0.1	0.0
10 11 78	0.1	0.00	0.0 0.00		9.3	0.0	0.01	0.1	5.6	0.03	7.3	0.2	0.0	3.9	0.00	0.0	3.5	0.0	0.0	0.0
11 22 78	0.0	0.01			7.2	0.0	0.01	0.0	3.1		5.6	0.0		3.1	0.00	0.0	3.6		0.0	0.0
1 8 79	0.1	0.00	0.0 0.00		4.2	0.0	0.01	0.0	1.8	0.10	4.4	0.0	0.0	2.1	0.01	0.0	4.0	0.0	0.0	0.0
2 1 79	0.0	0.00	0.0 0.00		4.6	0.0	0.01	0.0	1.8	0.01	4.4	0.0	0.0	2.2	0.00	0.0	3.8	0.0	0.0	0.0
3 6 79	0.1	0.01			4.7	0.0	0.00	0.0	1.8		4.8	0.0		1.8	0.02	0.0	4.0		0.0	0.0
4 11 79	0.1	0.00	0.0 0.00		4.0	0.1	0.01	0.1	1.7	0.15	4.5	0.0	0.0	2.0	0.03	0.1	4.1	0.0	0.1	0.0
5 24 79	0.1	0.00			5.4	0.0	0.00	0.1	2.4		5.0	0.1		2.1	0.02	0.0	4.4		0.0	0.0
6 27 79	0.0	0.03			6.2	0.0	0.00	0.0	3.1		6.2	0.1		2.5	0.00	0.0	5.3		0.0	0.0
8 1 79	0.0	0.01	0.1 0.00		5.0	0.0	0.00	0.1	2.8	0.03	4.9	0.1	0.0	2.0	0.01	0.0	5.5	0.0	0.1	0.3

TABLE 15. WATER QUALITY FOR SITE 3042 CARTER COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	MC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
6	2	77	17	0.01			95	186	95	1.27	6.9		11	14	0	5.2	44						
7	6	77	24	0.0000			85	378	227	1.23	7.0		34	41	0	4.3	120	0.0					
8	5	77	23	0.25			120	348	198	1.17	7.1		26	32	0	4.2	120	0.0					
10	6	77	14	0.07	0		0	384	259	1.00	4.7		0	0	0	2.4	170	0.5					
11	17	77	8	0.8	36		50	328	222	1.08	6.4		2	2	0	4.4	140	0.1					
12	27	77	0	0.025	38		10	280	209	1.22	6.7		34	41	0	2.0	110	0.6					
8	25	78	23	0.0008	31*		20	405	253	1.06	7.1		11	13	0	3.0	170	0.1					
10	11	78	16	0.02	147*		170	567	446	0.88	5.9		1	1	0	2.0	310	0.1					
11	22	78	12	0.008	21		95	386	295	1.07	6.3	8	8	10	0	3.8	190	0.1					
1	8	79	2	0.05	13		70	298	223	0.90	6.5	10	11	14	0	2.2	150	0.3					
2	1	79	0	0.07	30		80	502	364	1.01	6.3	22	5	6	0	3.0	240	0.1					
3	6	79	9	0.04	22		55	561	412	0.94	5.8	28	0	0	0	2.9	290	0.1					
4	11	79	13	0.09	19	0.02	40	474	347	0.94	6.4		2	3	0	2.9	240	0.1					
5	24	79	16	0.015	35		120	472	296	0.87	4.8	30	0	0	0	1.7	210	0.2					
6	27	79	20	0.002	12		50	445	283	0.88	6.5	8	7	9	0	3.8	190	0.1	0.0	0.87	3.45	0.05	0.00
8	1	79	25	0.008	19	0.06	65	524	332	1.07	7.3	2	14	17	0	3.7	210	0.1	0.0	0.87	1.35	0.05	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 2 77	0.1	0.01			8.3	0.0	0.00	6.2	3.2		7.9	4.7		2.2	0.06	0.0	3.0		0.0	0.0
7 6 77	0.0	0.01			25	0.1	0.00	7.2	7.3		21	6.6		3.2	0.06	0.0	3.2		0.0	0.1
8 5 77	0.0	0.01			19	0.1	0.00	0.1	5.1		21	6.2		3.3	0.05	0.0	2.6		0.0	0.0
10 6 77	0.7	0.03	0.1	0.00	24	0.2	0.00	4.0	5.4	0.08	28	8.5	0.0	1.9	0.21	0.0	2.8	0.1	0.0	0.2
11 17 77	0.1	0.00			23	0.1	0.00	1.7	8.7		21	9.2		3.9	0.09	0.0	3.0		0.0	0.1
12 27 77	0.1	0.00			16	0.1	0.00	7.4	7.4		22	7.0		3.3	0.08	0.0	3.4		0.2	0.1
8 25 78	0.1	0.02			25	0.1	0.01	0.8	4.9		27	8.4		3.3	0.05	0.1	3.7		0.1	0.0
10 11 78	0.3	0.00	0.1	0.00	42	0.1	0.00	19	5.5	0.15	41	13	0.0	3.5	0.13	0.1	3.1	0.1	0.2	0.2
11 22 78	0.2	0.01			34	0.1	0.01	10	4.8		28	9.1		3.9	0.10	0.1	3.7		0.2	0.1
1 8 79	0.1	0.00	0.0	0.00	16	0.1	0.00	8.4	2.8	0.15	22	6.6	0.0	2.8	0.05	0.0	3.6	0.1	0.1	0.1
2 1 79	0.1	0.00			35	0.1	0.01	12	4.0		37	14		4.6	0.09	0.0	4.5		0.1	0.0
3 6 79	0.1	0.01			37	0.2	0.01	7.9	4.2		44	14		4.3	0.11	0.0	4.7		0.1	0.1
4 11 79	0.0	0.00			32	0.1	0.00	4.8	3.6		36	13		4.1	0.07	0.0	3.8		0.0	0.1
5 24 79	0.5	0.00			29	0.1	0.02	4.6	4.3		27	8.6		2.8	0.11	0.0	2.8		0.1	0.1
6 27 79	0.0	0.02			22	0.1	0.01	2.0	3.7		28	11		4.3	0.06	0.0	5.3		0.1	0.3
8 1 79	0.1	0.03	0.2	0.00	33	0.1	0.02	1.8	4.6	0.09	35	15	0.0	5.5	0.00	0.0	5.1	0.1	0.1	0.3

TABLE 16. WATER QUALITY FOR SITE 3043 CARTER COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UN/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
6 2 77	17	0.007			4	530	290	1.17	7.0		25	31	0	3.4	180						
7 6 77	26	0.008			30	438	282	1.21	7.2		38	46	0	2.2	170	0.1					
8 5 77	23	0.005			35	423	266	1.26	7.5		34	42	0	1.9	160	0.1					
10 6 77	14	0.04			8	615	476	1.09	6.7		17	21	0	2.6	320	0.6					
11 17 77	10	0.02	50		4	602	413	0.93	7.1		37	45	0	2.3	280	0.1					
12 27 77	2	0.015	6		10	692	475	1.15	6.6		7	8	0	1.4	320	0.5					
2 3 78	0	0.1			20	364	249	1.10	6.2		3	4	0	1.6	170	0.2					
3 9 78	3	0.4	281		190	332	209	1.28	5.2		0	0	0	1.5	140	0.5					
4 3 78	14	0.15	6		4	372	234	1.13	5.4		0	0	0	1.6	160	0.2					
5 1 78	16	0.05	17*		8	374	210	1.13	4.5		0	0	0	1.5	140	0.9					
5 23 78	20	0.25	71*		90	398	236	1.12	5.3		0	0	0	1.1	160	0.2					
6 26 78	26	0.004	129*		30	328	195	1.55	7.7		34	41	0	1.9	100	0.1					
7 24 78	23	0.05			20	259	168	1.04	5.2		0	0	0	2.7	110	1.6					
8 25 78	23	0.0006	43*		30	387	268	1.72	8.0		60	72	0	2.6	130	0.0					
10 11 78	17	0.0002	65*		6	380	260	1.69	8.1		72	87	1	3.4	130	0.0					
11 22 78	12	0.005	12		1	326	222	1.01	7.2	-12	12	15	0	1.8	150	0.3					
1 8 79	3	0.15	28		4	319	194	1.10	4.5	13	0	0	0	1.3	130	0.3					
2 1 79	0	0.06	6		6	366	213	1.13	5.6	5	0	0	0	1.2	140	0.2					
3 6 79	6	0.07	2		7	346	248	0.95	4.9	9	0	0	0	1.3	180	0.2					
4 11 79	10	0.07	20	0.00	10	306	208	1.12	6.2		2	2	0	1.1	140	0.1					
5 24 79	14	0.007	26		20	463	316	0.89	4.8	17	0	0	0	0.8	230	0.2					
6 27 79	20	0.01	10		7	388		0.79	4.5		0	0	0	50	230	0.5 0.0	0.09	1.20	0.05	0.00	
8 1 79	26	0.09	37	0.26	75	397	239	0.97	4.6	20	0	0	0	1.2	170	0.6 0.1	0.06	3.05	0.85	0.01	

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 2 77	0.1	0.02			33	0.0	0.00	0.2	4.5		30	7.6		6.0	0.12	0.0	3.4		0.0	0.1
7 6 77	0.0	0.04			29	0.0	0.00	1.0	4.6		31	6.5		5.7	0.02	0.0	4.0		0.0	0.0
8 5 77	0.1	0.04			28	0.0	0.00	2.2	4.6		29	7.8		5.8	0.05	0.0	3.4		0.0	0.0
10 6 77	0.4	0.06	0.1	0.00	50	0.1	0.01	0.7	5.2	0.15	55	12	0.0	5.9	0.16	0.1	3.8	0.2	0.1	0.1
11 17 77	0.0	0.00			40	0.0	0.00	0.5	4.8		37	14		7.6	0.04	0.0	3.2		0.0	0.0
12 27 77	0.8	0.00			46	0.1	0.00	0.8	4.6		62	14		7.0	0.18	0.0	4.8		0.3	0.1
2 3 78	0.8	0.01	0.0	0.00	20	0.0	0.00	0.5	2.3	0.07	33	4.2	0.0	4.2	0.05	0.0	4.2	0.2	0.0	0.0
3 9 78	0.8	0.04			18	0.0	0.00	0.4	3.2		31	2.8		4.2	0.06	0.0	3.2		0.0	0.1
4 3 78	0.5	0.02	0.0	0.00	20	0.1	0.00	0.5	2.8	0.10	30	5.6	0.0	4.5	0.07	0.0	4.2	0.1	0.1	0.1
5 1 78	0.7	0.03			19	0.0	0.01	0.3	2.7		26	3.6		4.1	0.06	0.0	4.6		0.0	0.1
5 23 78	0.6	0.03			20	0.0	0.00	0.5	2.7		31	5.2		4.2	0.08	0.0	3.9		0.0	0.1
6 26 78	0.0	0.04			22	0.0	0.00	0.2	3.5		25	5.0		4.2	0.03	0.0	4.0		0.1	0.0
7 24 78	0.2	0.03	0.0	0.00	15	0.0	0.02	0.6	5.9	0.06	18	3.0	0.0	3.2	0.04	0.0	2.6	0.1	0.0	0.0
8 25 78	0.1	0.05			41	0.0	0.01	0.1	5.3		29	6.3		5.5	0.04	0.1	4.8		0.1	0.0
10 11 78	0.1	0.01	0.0	0.00	37	0.0	0.00	0.0	4.3	0.15	29	3.0	0.0	4.6	0.03	0.1	3.6	0.2	0.2	0.0
11 22 78	0.1	0.01			20	0.0	0.00	0.6	4.1		23	3.4		4.5	0.04	0.0	4.0		0.1	0.1
1 8 79	1.3	0.01	0.0	0.00	18	0.1	0.01	0.3	2.4	0.15	23	2.9	0.0	2.8	0.09	0.1	4.6	0.1	0.1	0.1
2 1 79	0.4	0.02	0.0	0.00	20	0.0	0.01	0.4	2.3	0.09	27	4.2	0.0	3.7	0.06	0.0	4.0	0.1	0.0	0.0
3 6 79	0.5	0.02			20	0.0	0.01	0.2	2.4		29	3.6		3.8	0.06	0.0	4.0		0.0	0.0
4 11 79	0.2	0.01			17	0.1	0.02	0.3	2.4		28	3.6		3.7	0.06	0.0	4.2		0.1	0.0
5 24 79	1.2	0.01			29	0.1	0.00	0.6	2.3		32	5.6		3.2	0.10	0.1	3.6		0.2	0.1
6 27 79	1.7	0.04			35	0.1	0.00	0.7	2.6		40	8.0		4.1	0.04	0.1	5.5		0.1	0.1
8 1 79	0.7	0.03			20	0.0	0.03	0.3	2.6		27	3.8		3.1	0.07	0.0	5.1		0.1	0.3

TABLE 17. WATER QUALITY FOR SITE 3044 CARTER COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
2 3 78	0	0.09			20	56	41	1.72	6.8			7	9	0	1.1	16	0.1				
3 10 78	2	0.15			25	63	41	1.85	6.4			7	9	0	1.1	15	0.2				
4 3 78	10	0.06	24		40	53	39	1.64	6.8			5	6	0	0.9	16	0.1				
5 1 78	13	0.04	28*		35	58	44	1.35	6.9			7	8	0	0.8	19	0.1				
5 23 78	17	0.07	99*		85	60	45	1.43	6.9			8	10	0	0.9	18	0.1				
7 24 78	22	0.06			3000	76						2	0	1	6.7	17	1.4				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
2 3 78	0.1	0.00	0.0	0.00	4.0	0.0	0.00	0.1	0.8	0.01	3.5	0.1	0.0	2.0	0.00	0.0	3.9	0.0	0.0	0.0
3 10 78	0.1	0.02			3.6	0.0	0.00	0.0	1.4		3.5	0.1		2.6	0.00	0.0	4.0		0.0	0.0
4 3 78	0.0	0.00	0.0	0.00	3.6	0.0	0.00	0.1	0.8	0.08	3.3	0.0	0.0	2.1	0.00	0.0	4.4	0.0	0.0	0.0
5 1 78	0.0	0.01			3.6	0.0	0.00	0.0	1.2		3.0	0.0		2.2	0.00	0.0	4.6		0.0	0.0
5 23 78	0.1	0.02			3.4	0.0	0.00	0.2	1.2		3.2	0.1		2.0	0.02	0.0	5.2		0.1	0.0
7 24 78	0.4	0.02			5.5	0.0	0.03	0.6	12		1.9	0.1			0.02	0.0	1.4		0.0	0.0

TABLE 18. WATER QUALITY FOR SITE 3051 CLAY COUNTY, KENTUCKY

														NO3 #NO3 NH3 TOT TOT ORTH									
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	AS N	AS N	AS N	AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
8	29	77	22	0.004			20	97	56	2.38	6.2		18	22	0	1.3	18	0.1					
10	3	77	16	0.06	8		10	49	37	1.46	7.9		8	10	0	1.9	13	0.0					
11	1	77	14	0.008	3		4	85	57	1.97	7.6		14	17	0	1.2	21	0.0					
11	30	77	10	0.6	14		25	65	41	1.33	6.0		7	8	0	0.8	19	0.1					
12	23	77	4	0.01			10	66	45	1.41	6.9		7	9	0	1.0	20	0.0					
1	31	78	1	0.5			20	67	43	1.61	6.8		7	8	0	1.0	17	0.2					
3	13	78	7	0.2	16		4	90	49	1.37	6.8		16	19	0	1.2	20	0.0					
4	10	78	13	0.06	15		30	88	48	1.35	6.8		4	5	0	1.3	23	0.1					
5	12	78	22	0.1	40*		30	82	49	1.14	7.1		7	9	0	3.4	22	0.3					
6	12	78	18	0.01			0	96	55	1.31	7.0		10	12	0	4.2	20	0.4					
7	5	78		0.0000	19*		15	79	53	2.68	7.4		18	22	0	1.3	13	0.3					
8	10	78	20	0.002	21*		10	75	48	2.72	7.0		16	19	0	0.6	13	0.2					
9	27	78	17	0.6	50*		25	95	63	2.45	7.5		29	35	0	1.6	17	0.3					
11	2	78	13	0.0000	26		40	104	61	2.40	7.7	-23	27	33	0	2.2	17	0.1					
12	6	78	5	0.003	17		10	63	37	1.90	6.3		7	9	0	0.9	13	0.1					
2	13	79		0.08	5		7	61	44	1.44	6.5		7	8	0	0.9	20	0.0					
3	20	79	11	0.06	8		6	63	45	1.38	6.3	-2	4	5	0	0.8	22	0.0					
4	10	79	9	0.02		0.01	40	59	45	1.31	6.7	-1	5	6	0	0.9	22	0.0					
5	16	79	15	0.0000	15		10	72	51	1.46	7.0	-4	8	10	0	0.9	22	0.4					
6	1	79	17	0.0008	44		45	75	58	1.41	7.1	0	12	15	0	0.7	26	0.1					
7	8	79	18	0.0001	30*		15	81	50	2.33	7.5		16	20	0	0.4	16	0.1	0.1	0.08	0.30	0.10	0.01
7	26	79	19	0.005	17		45	75	48	2.27	7.4	-7	16	19	0	0.7	15	0.2	0.0	0.04	0.60	0.15	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 29 77	0.0	0.00			6.8	0.0	0.00	0.0	2.1		4.4	0.0		3.7	0.01	0.0	4.2		0.0	0.1
10 3 77	0.1	0.01	0.0	0.00	2.0	0.0	0.00	0.0	1.7	0.01	2.4	0.0	0.0	2.2	0.03	0.0	4.3	0.0	0.0	0.0
11 1 77	0.1	0.00			7.1	0.0	0.00	0.1	1.6		4.4	0.0		3.3	0.00	0.0	4.4		0.0	0.0
11 30 77	0.0	0.00			4.0	0.0	0.01	0.0	1.3		2.7	0.0		2.6	0.00	0.0	3.0		0.0	0.0
12 23 77	0.0	0.00			3.8	0.0	0.00	0.0	1.1		3.6	0.0		2.6	0.00	0.0	3.8		0.0	0.0
1 31 78	0.1	0.00	0.0	0.00	3.9	0.0	0.00	0.1	1.3	0.01	3.7	0.0	0.0	2.2	0.01	0.0	3.8	0.0	0.0	0.0
3 13 78	0.1	0.00			3.8	0.0	0.00	0.1	1.2		3.6	0.0		2.1	0.02	0.0	3.3		0.0	0.0
4 10 78	0.1	0.00	0.0	0.00	4.2	0.0	0.00	0.1	1.3	0.30	3.9	0.0	0.0	2.6	0.00	0.0	3.9	0.2	0.1	0.0
5 12 78	0.1	0.00			3.9	0.0	0.00	0.1	1.5		3.5	0.0		2.7	0.00	0.0	3.0		0.0	0.0
6 12 78	0.0	0.00			4.4	0.0	0.00	0.1	1.6		4.0	0.0		2.8	0.01	0.0	4.5		0.0	0.0
7 5 78	0.0	0.01	0.0	0.00	5.1	0.0	0.00	0.0	2.0	0.02	4.4	0.0	0.0	2.9	0.01	0.0	5.3	0.0	0.0	0.0
8 10 78	0.0	0.00			5.5	0.0	0.01	0.1	2.0		4.0	0.1		2.7	0.01	0.0	4.5		0.0	0.0
9 27 78	0.0	0.01			6.6	0.0	0.00	0.1	2.0		5.0	0.0		3.1	0.01	0.0	4.1		0.1	0.0
11 2 78	0.0	0.00			6.2	0.1	0.02	0.0	2.2		4.5	0.0		4.4	0.03	0.0	3.5		0.0	0.0
12 6 78	0.1	0.00			3.9	0.0	0.01	0.1	1.4		2.8	0.0		2.0	0.02	0.0	3.5		0.1	0.0
2 13 79	0.1	0.00	0.0	0.00	4.5	0.0	0.01	0.0	1.2	0.04	3.2	0.0	0.0	2.3	0.01	0.0	3.5	0.0	0.0	0.0
3 20 79	0.1	0.01			4.6	0.0	0.01	0.0	1.6		3.3	0.0		2.5	0.01	0.0	3.9		0.0	0.0
4 10 79	0.1	0.00	0.2	0.00	4.6	0.0	0.01	0.1	1.3	0.02	3.5	0.0	0.0	2.0	0.01	0.0	3.4	0.0	0.0	0.2
5 16 79	0.0	0.01			5.2	0.0	0.00	0.1	1.3		4.1	0.0		2.3	0.01	0.0	3.8		0.1	0.0
6 1 79	0.3	0.00			5.6	0.0	0.01	0.1	1.6		4.2	0.2		2.6	0.02	0.0	4.2		0.0	0.3
7 8 79	0.0	0.00	0.0	0.00	5.4	0.0	0.01	0.0	1.8	0.07	4.1	0.0	0.0	2.6	0.01	0.0	4.5	0.0	0.0	0.0
7 26 79	0.1	0.01			5.6	0.0	0.02	0.0	1.9		3.6	0.0		2.5	0.01	0.0	4.0		0.0	0.0

TABLE 19. WATER QUALITY FOR SITE 3052 CLAY COUNTY, KENTUCKY

														NO3						TOT		TOT ORTH	
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	AS N	AS N	NH3 AS N	TOT N	P	PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
7	29	77	22	0.15			500	446	292	1.34	7.7		54	66	0	2.2	150	5.5					
8	29	77	26	0.01			40	479	297	1.96	7.4		84	103	0	2.2	130	2.7					
10	3	77	17	2.0	4210			571	417	1.17	7.1		14	17	0	1.7	190	22					
11	1	77	16	0.1	31		4	400	248	2.07	7.8		70	85	0	3.5	110	1.3					
11	30	77	8	4	38		140	375	240	1.32	7.7		25	31	0	2.0	120	6.7					
12	23	77	6	0.1			15	460	357	1.08	7.6		61	75	0	1.8	200	4.9					
1	31	78	0	2.0	7750		10000	328	207	1.59	7.2		16	20	0	2.8	100	5.2					
3	13	78	9	0.6				372	260	1.26	7.2		32	39	0	4.0	130	7.3					
4	10	78	19	0.4	21		40	490	298	1.75	8.0		60	72	0	1.9	140	4.0					
5	12	78	21	0.1	3090*		3200		383	0.97	7.5		25	31	0	1.3	220	10					
6	12	78	23	0.2			0	505	338	1.44	8.0		70	84	1	1.6	170	6.4					
7	5	78	22	0.02	19*		20	528	341	1.91	8.2		94	113	1	2.8	150	4.8					
8	10	78	25	0.04	21*		25	529	316	1.82	8.1		79	94	1	1.3	150	1.7					
9	27	78	20	0.007	79*		4	490	310	1.49	8.2		99	119	1	1.8	150	0.3					
11	2	78	15	0.003	17*		4	512	345	1.56	7.9	-100	110	133	1	2.2	170	0.2					
12	6	78	6	0.01			55	548	359	1.81	7.8		73	88	0	1.5	180	2.7					
1	17	79	4	0.08			190	648	515	1.16	7.6		49	60	0	1.3	310	5.5					
3	20	79	15	0.6	28		30	637	477	1.39	7.8	-59	62	75	0	0.9	290	0.5					
4	10	79	11	0.1	11	0.01	30	486	349	1.31	7.7	-42	42	51	0	1.0	210	2.2					
5	16	79	20	0.0008	18	0.00	4	650	443	1.36	8.1	-79	70	84	1	1.0	250	3.2					
6	1	79	22	0.03	30	0.01	35	491	324	1.28	8.3	-61	61	73	1	0.9	180	2.6					
7	8	79	24	0.03	3		8	661	442	1.40	8.2	-82	88	105	1	1.7	250	1.7	0.3	0.00	0.95	0.20	0.01
7	26	79	24	0.5	751		1700	321	181	1.41	7.3	-22	29	35	0	0.9	99	1.1	0.4	0.35	1.15	0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 29 77	0.2	0.03			39	0.1	0.00	0.2	4.9		26	1.1		8.3	0.04	0.2	3.3		0.2	0.0
8 29 77	0.1	0.00			52	0.0	0.00	0.1	6.0		26	0.3		13	0.02	0.0	3.5		0.0	0.2
10 3 77	0.1	0.02	0.1	0.00	59	0.0	0.00	0.1	6.2	0.25	35	1.4	0.0	7.0	0.05	0.0	3.1	0.2	0.0	0.0
11 1 77	0.1	0.00			41	0.0	0.00	0.1	3.5		25	0.3		12	0.01	0.0	3.8		0.0	0.0
11 30 77	0.1	0.00			35	0.0	0.00	0.1	2.9		21	1.3		5.6	0.01	0.0	3.4		0.0	0.0
12 23 77	0.1	0.00			43	0.0	0.00	0.1	3.6		28	1.5		9.2	0.01	0.0	3.7		0.0	0.0
1 31 78	0.2	0.00	0.0	0.00	30	0.0	0.01	0.2	3.8	0.15	23	0.4	0.0	6.2	0.02	0.0	3.2	0.2	0.0	0.0
3 13 78	1.0	0.01			32	0.0	0.08	1.3	4.2		24	0.7		6.1	0.04	0.0	3.8		0.1	0.1
4 10 78	0.1	0.00	0.0	0.00	46	0.0	0.00	0.1	3.6	0.08	33	0.9	0.0	9.7	0.00	0.0	3.5	0.0	0.0	0.0
5 12 78	0.1	0.00			57	0.0	0.01	0.1	4.4		26	1.2		5.2	0.00	0.1	1.5		0.0	0.0
6 12 78	0.1	0.01			47	0.0	0.00	0.1	3.8		31	0.6		9.9	0.02	0.0	3.4		0.1	0.0
7 5 78	0.1	0.01	0.1	0.00	53	0.0	0.00	0.1	5.1	0.20	35	0.3	0.0	13	0.02	0.0	3.5	0.3	0.1	0.0
8 10 78	0.2	0.01			54	0.0	0.01	0.2	5.2		30	0.5		13	0.02	0.1	3.4		0.1	0.0
9 27 78	0.1	0.01			43	0.0	0.01	0.1	4.4		24	0.0		15	0.03	0.1	2.6		0.1	0.0
11 2 78	0.1	0.01	0.0	0.00	52	0.0	0.01	0.0	3.9	0.55	25	0.0	0.0	18	0.01	0.0	3.0	0.3	0.1	0.0
12 6 78	0.2	0.00			71	0.0	0.01	0.1	3.7		34	1.0		9.5	0.03	0.1	3.0		0.1	0.0
1 17 79	0.6	0.00	0.3	0.00	82	0.0	0.05	0.7	4.6	0.55	42	1.2	0.0	7.5	0.05	0.1	3.2	0.3	0.2	0.2
3 20 79	0.2	0.00			86	0.0	0.00	0.0	3.8		43	0.8		9.5	0.06	0.1	3.4		0.2	0.0
4 10 79	0.8	0.00	0.2	0.00	57	0.0	0.01	0.2	2.5	0.35	32	0.9	0.0	5.3	0.03	0.0	2.9	0.3	0.1	0.2
5 16 79	0.2	0.00			74	0.0	0.02	0.2	4.6		37	0.1		12	0.02	0.1	2.8		0.2	0.0
6 1 79	0.1	0.00			48	0.0	0.01	0.1	3.2		28	0.3		6.8	0.01	0.0	3.2		0.1	0.3
7 8 79	0.1	0.01	0.1	0.00	67	0.0	0.01	0.1	4.5	0.45	40	0.1	0.1	13	0.03	0.1	3.2	0.4	0.1	0.0
7 26 79	0.7	0.02			28	0.0	0.02	0.7	3.4		17	0.2		2.9	0.00	0.1	2.8		0.1	0.1

TABLE 20. WATER QUALITY FOR SITE 3053 CLAY COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HC03	C03	CL	S04	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
5	26	77	17	0.04			10	611	427	1.04	3.9		0	0	0	1.6	280		0.2				
7	5	77	20	0.01			0	594	422	0.76	4.2		0	0	0	0.5	310		0.1				
7	29	77	20	0.15			12000	890	558	0.73	3.9		0	0	0	0.6	410		0.5				
8	29	77	22	0.006			60	563	423	0.93	4.9		0	0	0	0.6	290		0.1				
10	3	77	14	0.04	0		0	644	464	0.78	4.5		0	0	0	0.7	340		0.1				
11	1	77	14	0.015	31		25	850	560	0.93	4.2		0	0	0	0.8	390		0.2				
11	30	77	8	0.15	14		4	696	509	0.70	4.0		0	0	0	0.7	370		0.4				
12	23	77	6	0.01			0	394	284	0.77	4.2		0	0	0	0.6	200		0.2				
1	31	78	2	0.06			10	760	651	0.80	4.3		0	0	0	0.6	460		0.4				
3	13	78	7	0.05	9		4	1060	859	0.59	3.1		0	0	0	3.1	620		0.5				
4	10	78	14	0.02	22		0	1350	1170	0.55	3.3		0	0	0	0.8	870		0.3				
5	12	78	22	0.03	57*		20	1140	751	0.56	3.3		0	0	0	1.8	560		0.3				
6	12	78	23	0.007			20	557	371	0.69	4.0		0	0	0	4.2	260		0.2				
7	5	78	23	0.0000	25*		8	323	232	0.84	4.9		0	0	0	0.6	150		0.1				
8	10	78	24	0.002	244*		85	543	378	0.85	3.8		0	0	0	0.4	260		0.2				
11	2	78	15	0.0000	38*		9	600	414	0.91	4.3	68	0	0	0	1.3	290		0.1				
12	6	78	9	0.002	5		1	823	561	0.84	4.2		0	0	0	0.6	390		0.2				
3	20	79	13	0.01	4		0	1190	1070	0.57	3.9	320	0	0	0	0.5	810		0.2				
4	10	79	11	0.002	6	0.06	5	1440	1190	0.48	3.0	420	0	0	0	0.6	910		0.2				
5	17	79	10	0.0000	8		15	1120	846	0.57	3.2	270	0	0	0	0.8	640		0.2				
6	1	79	22	0.0001	15		15	859	615	0.57	3.8	180	0	0	0	0.5	470		0.1				
7	9	79	19	0.001	44*		50	1210	1060	0.60	3.7	230	0	0	0	0.7	790	0.2	0.0	0.07	0.30	0.15	0.01
7	28	79	22	0.02	0		20	552	372	0.69	4.1	54	0	0	0	0.4	270	0.0	0.0	0.02	0.80	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
5 26 77	7.0	0.01			54	0.2	0.01	0.4	2.9		40	10		4.8	0.42	0.1	9.1		0.1	0.6
7 5 77	6.1	0.01			39	0.2	0.01	0.4	3.0		33	9.2		3.9	0.36	0.2	8.0		0.1	0.5
7 29 77	17	0.01			91	0.2	0.07	1.7	2.3		19	4.2		0.9	0.33	0.2	3.1		0.0	0.6
8 29 77	1.9	0.00			61	0.1	0.00	3.7	3.4		28	9.8		4.6	0.25	0.0	7.6		0.0	0.6
10 3 77	9.4	0.00	0.0	0.00	54	0.3	0.01	1.2	3.3	0.15	31	1.4	0.0	4.0	0.47	0.1	8.4	0.1	0.1	0.5
11 1 77	7.8	0.00			70	0.2	0.00	3.7	2.7		46	16		4.7	0.37	0.0	9.3		0.0	0.5
11 30 77	18	0.00			44	0.3	0.00	0.6	2.5		37	17		3.2	0.34	0.0	7.5		0.0	0.5
12 23 77	4.9	0.00			27	0.1	0.00	2.1	1.8		22	7.0		2.3	0.18	0.0	6.0		0.0	0.2
1 31 78	31	0.00	0.0	0.00	56	0.4	0.02	1.6	3.0	0.30	56	18	0.0	3.8	0.62	0.0	9.0	0.2	0.1	0.7
3 13 78	49	0.00			60	0.6	0.04	18	2.8		55	22		3.2	0.77	0.0	9.7		0.2	1.7
4 10 78	59	0.00	0.0	0.01	74	0.7	0.04	6.0	3.5	0.40	73	39	0.0	4.5	1.1	0.0	13	0.2	0.2	1.7
5 12 78	31	0.00			63	0.5	0.05	13	3.3		39	19		3.9	0.52	0.1	5.5		0.1	0.7
6 12 78	8.2	0.00			27	0.2	0.01	2.6	2.7		29	10		3.4	0.28	0.0	8.2		0.1	0.4
7 5 78	0.4	0.01	0.0	0.00	18	0.1	0.00	9.9	2.6	0.08	19	9.5	0.0	3.9	0.08	0.0	6.6	0.1	0.1	0.0
8 10 78	4.7	0.00			45	0.1	0.02	3.0	3.2		26	11		3.8	0.25	0.1	9.2		0.1	0.3
11 2 78	2.6	0.01			71	0.1	0.01	0.0	7.4		17	8.0		6.0	0.08	0.0	6.8		0.0	0.1
12 6 78	17	0.00			65	0.3	0.02	0.3	2.9		42	16		3.8	0.51	0.1	8.6		0.1	0.8
3 20 79	51	0.00			79	0.6	0.04	0.9	3.2		66	25		3.9	0.98	0.1	11		0.2	1.1
4 10 79	57	0.01	0.2	0.01	72	0.6	0.06	23	2.9	0.45	65	24	0.0	3.1	1.0	0.1	11	0.2	0.4	2.1
5 17 79	37	0.00			60	0.5	0.05	5.4	2.9		52	20		3.6	0.84	0.1	11		0.2	1.3
6 1 79	20	0.01			47	0.3	0.03	1.2	2.6		37	14		3.0	0.54	0.1	8.7		0.1	1.0
7 9 79	44	0.00	0.0	0.01	98	0.5	0.04	1.9	3.7	0.40	58	23	0.1	3.6	0.83	0.1	12	0.1	0.2	1.1
7 28 79	13	0.00			33	0.2	0.02	0.4	2.0		25	7.6		2.1	0.32	0.1	7.6		0.2	0.4

TABLE 21. WATER QUALITY FOR SITE 3054 CLAY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
7 5 77	24	0.01			15	63	32	2.22	7.0		9	11	0	0.7	9	0.0					
7 29 77	20	0.09			220	48	30	1.84	6.9		7	8	0	0.6	11	0.0					
12 15 78							28	1.58	5.4		0	0	0	1.3	11						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
7 5 77	0.0	0.01			2.1	0.0	0.00	0.1	1.2		2.3	0.0		2.5	0.00	0.0	4.0		0.0	0.0
7 29 77	0.1	0.01			2.1	0.0	0.00	0.1	1.6		2.4	0.0		2.2	0.01	0.1	2.6		0.1	0.0
12 15 78	0.2	0.00			1.8	0.0	0.00	0.1	2.4		1.9	0.0		1.7	0.00	0.0	3.6		0.0	0.0

TABLE 22. WATER QUALITY FOR SITE 3056 CLAY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
1 26 79	2	0.0001			6	176	102	0.93	4.6		0	0	0	0.5	67	0.1					
3 20 79	17	0.001				190	113	0.76	4.5		0	0	0	0.4	79	0.0					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
1 26 79	1.4	0.00			13	0.0	0.02	0.1	1.0		7.0	0.6		1.6	0.06	0.0	3.8		0.0	0.4
3 20 79	0.9	0.00			13	0.0	0.01		1.0		6.6	1.3		1.2	0.05	0.1	4.5		0.1	0.0

TABLE 23. WATER QUALITY FOR SITE 3061 CLINTON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	S04	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
11 3 77	18	0.03	13		8	374	176	14.0	8.0		133	160	1	2.4	12	0.6					
12 2 77	12	0.1	4		4	285	134	10.0	8.0		98	119	1	2.0	12	0.6					
12 29 77	4	0.06	5		10	278	157	10.8	8.1		128	154	1	2.3	13	0.4					
2 8 78	3	0.1			4	255	154	11.3	8.2		118	141	1	2.3	12	1.1					
3 20 78	13	0.1			4	251	121	9.74	7.9		93	112	1	2.5	10	1.5					
4 13 78	11	0.04	31*		6	263	147	9.16	8.3		106	126	1	3.4	13	1.9					
5 9 78	25	0.06	33*		7									3.2	13	0.9					
6 9 78	18	0.05			30	294	161	8.94	8.2		128	153	1	2.6	17						
7 7 78	20	0.03	29*		20	314	175	14.7	8.4		134	158	2	3.3	10	1.7					
8 8 78	19	0.05	33*		8	327	167	15.7	7.9		120	146	1	2.8	10	1.3					
9 26 78	19	0.001	58*		15	246	134	11.2	8.2		116	138	1	1.7	10	0.4					
10 31 78	12	0.002	12		9	360	208	14.6	8.4		177	209	3	2.3	13	0.3					
12 5 78	12	0.03	22		10	282	159	14.9	8.3		114	136	2	3.2	10	1.6					
1 18 79	7	0.05	11		2	220	127	12.4	7.9		92	111	1	2.8	10	0.7					
3 5 79	9	0.01	41		4	247	150	8.11	7.8		100	121	0	2.1	17	1.5					
4 5 79	17	0.002			2	223	141	6.68	8.3		95	113	1	1.4	20	0.3					
5 8 79	15	0.0003	37	0.00	55	218	140	11.7	8.3		105	125	1	2.9	11	0.8					
6 8 79	20	0.0000			15		175	9.22	8.5		124	145	3	3.1	18	1.2					
7 2 79	24	0.002	8		10	282	144	9.42	8.6		119	138	3	3.5	11	1.2	0.2	0.05	0.85	0.05	0.01
7 25 79	21	0.002	10		10	330	166	17.4	8.4		134	158	2	2.0	9	0.8	0.1	0.05	0.90	0.00	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
11 3 77	0.1	0.00			58	0.0	0.00	0.1	2.2		7.0	0.1		1.7	0.00	0.0	4.5		0.0	0.1
12 2 77	0.0	0.00			46	0.0	0.00	0.0	0.5		4.4	0.1		1.2	0.00	0.0	2.8		0.0	0.0
12 29 77	0.1	0.00	0.1	0.00	49	0.0	0.00	0.0	0.8	0.25	6.0	0.0	0.0	1.3	0.00	0.0	2.9	0.2	0.0	0.0
2 8 78	0.1	0.01	0.0	0.00	47	0.0	0.01	0.0	0.8	0.25	6.4	0.0	0.0	2.3	0.02	0.0	3.1	0.2	0.0	0.0
3 20 78	0.2	0.00			34	0.0	0.00	0.1	1.0		4.7	0.1		1.3	0.03	0.0	2.7		0.1	0.0
4 13 78	0.1	0.00	0.0	0.00	42	0.0	0.00	0.0	1.1	0.15	6.6	0.1	0.0	1.8	0.00	0.0	2.8	0.2	0.1	0.0
5 9 78	0.1	0.00			28	0.1	0.02	0.0	1.0		3.5	0.1		1.5	0.00	0.1	3.5		0.0	0.0
6 9 78	0.1	0.00			48	0.0	0.00	0.1	1.6		6.9	0.1		1.5	0.01	0.0	3.0		0.0	0.0
7 7 78	0.1	0.01	0.0	0.00	53	0.0	0.00	0.1	1.5	0.20	7.3	0.0	0.0	2.2	0.01	0.0	3.8	0.2	0.1	0.0
8 8 78	0.1	0.00			59	0.0	0.01	0.1	0.9		5.6	0.0		1.6	0.01	0.1	3.6		0.0	0.0
9 26 78	0.1	0.01			36	0.0	0.01	0.1	1.6		6.3	0.0		1.0	0.02	0.2	2.7		0.2	0.0
10 31 78	0.2	0.01			62	0.0	0.00	0.1	4.3		9.2	0.0		1.3	0.01	0.1	3.6		0.1	0.0
12 5 78	0.1	0.00			56	0.0	0.01	0.0	0.9		4.5	0.0		1.6	0.01	0.1	3.6		0.0	0.0
1 18 79	0.1	0.00	0.0	0.00	43	0.0	0.00	0.0	0.7	0.20	4.2	0.0	0.0	1.0	0.02	0.1	3.0	0.1	0.1	0.0
3 5 79	0.2	0.00			49	0.0	0.01	0.0	0.8		6.3	0.1		1.4	0.01	0.0	2.7		0.0	0.7
4 5 79	0.2	0.00	0.0	0.00	48	0.0	0.02	0.0	0.8	0.25	4.5	0.2	0.0	1.2	0.02	0.1	2.8	0.1	0.1	0.0
5 8 79	0.1	0.00			47	0.0	0.01	0.0	1.6		4.5	0.0		1.1	0.01	0.1	2.6		0.0	0.0
6 8 79	0.1	0.00			59	0.0	0.00	0.0	1.0		6.0	0.1		1.5	0.01	0.0	3.1		0.0	0.0
7 2 79	0.1	0.00	0.0	0.00	37	0.1	0.02	0.0	1.3	0.25	5.4	0.0	0.0	1.3	0.03	0.1	3.0	0.2	0.0	0.0
7 25 79	0.2	0.00			55	0.2	0.09	0.0	1.3		6.3	0.0		1.5	0.01	0.1	3.2		0.0	0.0

TABLE 24. WATER QUALITY FOR SITE 3062 CLINTON COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
8	3	77	25	0.03			35	1310	990	0.96	4.5		0	0	0	1.2	720	0.8					
8	31	77	26	0.03			10	1280	1080	0.91	4.1		0	0	0	0.7	800	0.5					
10	5	77	17	0.015	45		0	1420	1270	0.88	4.7		0	0	0	1.2	940	0.7					
11	3	77	18	0.06	5		0	1350	1120	0.92	4.6		0	0	0	1.0	820	0.4					
12	2	77	10	0.4	7		4	960	660	0.88	4.4		0	0	0	1.0	480	0.5					
12	29	77	2	0.04	19		8	1070	770	1.15	4.8		0	0	0	4.9	530	0.3					
2	8	78	0	0.1			160	967	692	1.14	4.8		0	0	0	0.7	480	0.7					
3	20	78	12	0.1			75	755	581	1.02	4.6		0	0	0	0.9	410	0.5					
4	13	78	11	0.1	47%		9	858	631	0.97	4.8		0	0	0	1.0	460	0.5					
5	9	78	24	0.2	40%		30	619	421	1.00	4.8		0	0	0	1.4	300	0.4					
6	7	78	15	0.08			10	873	629	0.93	4.6		0	0	0	0.8	460	0.8					
7	7	78	24	0.03	32%		8	980	706	1.07	4.8		0	0	0	0.9	490	0.4					
8	8	78	18	0.06	22%		10	946	683	0.91	4.3		0	0	0	1.0	490	0.6					
12	5	78	7	0.09			30	635	409	0.99	4.8		0	0	0	0.6	290	0.2					
1	18	79	5	0.15	8		25	721	551	1.01	4.5		0	0	0	0.6	390	0.4					
3	5	79	7	0.08	122		120	640	516	0.99	4.9	15	0	0	0	0.8	370	0.5					
4	5	79	12	0.04			55	494	374	1.04	5.1	8	0	0	0	0.8	260	0.2					
5	8	79	17	0.04	107	0.00	280	578	416	1.04	4.7	11	0	0	0	0.7	290	0.5					
6	8	79	20	0.004	112		7	708	556	0.91	4.3	26	0	0	0	1.1	410	0.3					
7	1	79	23	0.002				808	631	0.85	4.7	19	0	0	0	0.7	470	0.2	0.0	0.06	0.00	0.25	0.01
7	25	79	22	0.03	9		60	917	564	1.10	4.6	26	0	0	0	0.5	390	0.4	0.1	0.05	0.65	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 77	6.4	0.01			130	0.1	0.01	0.5	4.0		94	14		6.0	0.49	0.1	8.0		0.1	0.2
8 31 77	6.5	0.02			140	0.1	0.01	0.4	3.8		95	7.6		5.5	0.47	0.1	8.2		0.1	0.2
10 5 77	7.4		0.0	0.01	150	0.1	0.02	0.1	3.8	0.45	110	18	0.0	5.7	0.52	0.1	8.8	0.6	0.2	0.2
11 3 77	6.3	0.00			150	0.1	0.00	0.4	3.1		95	16		4.7	0.41	0.0	8.9		0.1	0.3
12 2 77	6.2	0.00			81	0.0	0.00	0.2	2.3		56	15		2.7	0.26	0.0	6.3		0.0	0.2
12 29 77	6.9	0.00	0.0	0.00	100	0.1	0.00	0.2	3.2	0.55	89	13	0.0	3.5	0.38	0.1	7.2	0.5	0.2	0.2
2 8 78	2.7	0.00	0.0	0.00	95	0.1	0.01	0.2	2.7	0.50	79	10	0.0	3.4	0.38	0.1	6.1	0.4	0.1	0.1
3 20 78	4.4	0.00			77	0.1	0.02	1.1	2.8		58	8.6		2.8	0.30	0.0	5.6		0.2	0.2
4 13 78	0.4	0.00	0.0	0.00	79	0.1	0.00	0.1	2.7	0.30	63	8.2	0.0	2.9	0.13	0.1	5.6	0.4	0.1	0.1
5 9 78	1.9	0.00			51	0.0	0.00	0.1	2.0		43	7.9		2.3	0.18	0.0	5.5		0.1	0.1
6 7 78	1.4	0.00			78	0.0	0.00	0.1	2.5		59	8.1		3.4	0.27	0.0	6.6		0.1	0.1
7 7 78	5.8	0.02	0.0	0.01	95	0.1	0.00	1.2	2.9	0.30	73	11	0.0	3.8	0.38	0.0	7.9	0.4	0.2	0.1
8 8 78	6.9	0.01			82	0.1	0.01	0.4	3.0		62	11		2.9	0.36	0.1	8.7		0.1	0.2
12 5 78	3.2	0.00			56	0.1	0.01	0.2	2.5		36	6.5		2.0	0.23	0.1	6.0		0.1	0.1
1 18 79	3.7	0.01	0.0	0.00	78	0.1	0.01	0.1	2.2	0.60	51	7.8	0.0	2.2	0.30	0.2	5.9	0.3	0.3	0.1
3 5 79	3.7	0.01			71	0.1	0.02	0.2	2.1		48	7.5		2.0	0.25	0.1	5.3		0.1	0.8
4 5 79	0.9	0.01	0.0	0.00	55	0.0	0.02	0.1	1.8	0.30	35	4.5	0.0	1.8	0.17	0.1	4.6	0.1	0.2	0.1
5 8 79	0.5	0.00			62	0.0	0.00	0.0	1.8		38	5.0		1.8	0.16	0.0	4.8		0.1	0.1
6 8 79	2.3	0.01			72	0.0	0.01	0.1	2.3		48	7.3		2.4	0.23	0.1	6.4		0.2	0.1
7 1 79	2.1	0.01	0.0	0.01	75	0.1	0.01	0.2	2.4	0.55	53	6.7	0.1	2.9	0.27	0.1	7.2	0.4	0.2	0.1
7 25 79	4.4	0.03			82	0.1	0.03	0.1	3.2		56	11		3.2	0.29	0.1	7.1		0.2	0.2

TABLE 25. WATER QUALITY FOR SITE 3063 CLINTON COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NC03	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
8	3	77	28	0.03			75	4500	4950	0.42	2.6		0	0	0	2.8	3700	0.0					
8	31	77	28	0.02			70	5240	5610	0.39	2.3		0	0	0	1.4	4300	0.0					
10	5	77					20	4910	5900	0.47	2.3		0	0	0	1.9	4200	0.2					
11	3	77	20	0.04			0	4270	4600	0.43	2.7		0	0	0	2.0	3500	0.2					
12	2	77	8	0.2	67*		4	2630	1870	0.60	2.6		0	0	0	2.3	1400	0.4					
12	29	77	1	0.005			15	3420	2940	0.53	2.6		0	0	0	2.4	2200	0.3					
2	7	78	0	0.1			20	1610	1270	0.77	3.3		0	0	0	5.6	900	0.6					
3	20	78	15	0.25			4	1770	1360	0.62	2.8		0	0	0	3.8	1000	0.7					
4	13	78	15	0.15	33*		10	2810	2270	0.56	2.7		0	0	0	3.3	1700	0.3					
5	9	78	25	0.3	20*		10	1790	1170	0.58	2.7		0	0	0	2.6	850	0.3					
6	9	78	17	0.15			8	2800	2280	0.51	2.7		0	0	0	2.2	1700	0.6					
7	7	78	27	0.06	32*		20	3330	2870	0.53	2.7		0	0	0	2.2	2100	0.0					
8	8	78	20	0.4	31*		10	2800	1990	0.47	2.7		0	0	0	2.0	1500	0.3					
9	26	78	24	0.002	48*		15	4030	4150	0.32	2.4		0	0	0	1.3	3200	0.1					
10	31	78	15	0.02	19		15	4010	3640	0.42	2.9	1300	0	0	0	1.3	2700	0.0					
12	5	78	7	0.05	6		3	1840	1430	0.60	2.5		0	0	0	1.8	1000	0.3					
1	18	79	7	0.15	13		110	1950	1470	0.79	2.7	520	0	0	0	2.9	1000	0.4					
3	5	79	9	0.03	63		60	1450	1110	0.63	3.1	300	0	0	0	2.5	810	0.3					
4	10	79	8	0.2	124		600	1200	788	0.71	3.0	230	0	0	0	2.1	560	0.2					
5	8	79	21	0.03	270	0.60	750	1650	1180	0.64	2.8	380	0	0	0	2.3	870	0.1					
6	8	79	26	0.02	77		180	2860	1850	0.52	2.8	660	0	0	0	2.3	1400	0.3					
7	2	79	27	0.02	101		80	3100	2160	0.59	2.7	960	0	0	0	2.3	1600	0.2	0.1	0.58	2.40	0.30	0.01
7	25	79	20	0.005	45		75	2960	1870	0.73	2.7	680	0	0	0	2.3	1300	0.2	0.1	0.80	1.65	0.00	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MM	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
8 3 77	200	0.12			330	1.3	0.11	330	2.7		190	36		13	2.1	0.2	42		0.8	2.6
8 31 77	240	0.13			360	1.1	0.07	330	4.2		200	35		15	2.5	0.2	46		0.5	2.4
10 5 77	240	0.14	0.0	0.05	400	0.9	0.07	620	4.4	1.0	240	45	0.2	17	2.6	0.4	48	2.4	1.1	2.5
11 3 77	140	0.03			330	0.7	0.04	330	3.3		170	33		12	1.4	0.1	45		0.4	2.3
12 2 77	79	0.03			180	0.4	0.00	91	2.0		97	19		6.4	0.76	0.1	17		0.3	0.8
12 29 77	130	0.01	0.1	0.03	240	0.6	0.02	170	2.6	1.5	140	26	0.0	9.2	1.2	0.1	22	2.3	0.5	1.0
2 7 78	39	0.00	0.0	0.01	150	0.3	0.02	38	2.6	0.80	82	13	0.0	6.3	0.50	0.1	11	0.9	0.2	0.4
3 20 78	44	0.04			130	0.3	0.03	52	2.3		75	13		5.6	0.55	0.1	12		0.3	0.4
4 13 78	74	0.02	0.0	0.03	190	0.5	0.04	92	3.1	0.75	120	31	0.0	8.4	0.94	0.1	20	1.4	0.3	1.0
5 9 78	37	0.00			100	0.3	0.03	70	1.9		60	13		5.2	0.44	0.0	11		0.2	0.4
6 9 78	79	0.02			190	0.5	0.04	120	2.3		100	20		7.7	0.99	0.1	25		0.4	0.8
7 7 78	100	0.05	0.0	0.03	240	0.7	0.05	180	3.0	0.75	130	24	0.2	9.4	1.5	0.1	29	1.4	0.6	1.3
8 8 78	49	0.04			150	0.4	0.04	110	2.7		86	15		6.3	0.80	0.2	23		0.5	0.7
9 26 78	95	0.10			210	0.6	0.04	350	4.8		130	23		10	1.4	0.5	39		1.2	1.4
10 31 78	120	0.24			230	0.7	0.04	340	5.1		140	24		11	1.8	0.4	37		1.7	2.1
12 5 78	56	0.02			140	0.4	0.04	80	2.5		70	12		5.6	0.68	0.3	16		0.4	0.6
1 18 79	49	0.02	0.0	0.02	180	0.3	0.03	72	2.2	0.75	92	17	0.1	5.5	0.71	0.3	15	0.8	0.4	0.7
3 5 79	34	0.01			110	0.2	0.03	50	2.4		59	9.0		4.8	0.48	0.2	10		0.3	1.0
4 10 79	22	0.01	0.1	0.01	93	0.2	0.01	31	1.5	0.40	44	6.4	0.0	3.1	0.31	0.1	8.2	0.3	0.3	0.4
5 8 79	33	0.01			120	0.2	0.03	41	2.4		63	9.4		5.0	0.52	0.0	13		0.2	0.5
6 8 79	58	0.02			160	0.4	0.04	82	2.6		84	15		6.1	0.75	0.1	19		0.3	0.7
7 2 79	72	0.04	0.0	0.03	200	0.5	0.03	110	3.0	1.5	110	22	0.1	8.5	1.0	0.2	26	1.5	0.5	1.1
7 25 79	53	0.04	0.0	0.02	210	0.4	0.10	79	2.4	0.95	110	21	0.3	6.1	0.85	0.2	23	1.2	0.5	0.8

TABLE 26. WATER QUALITY FOR SITE 3071 ELLIOTT COUNTY, KENTUCKY

TABLE 201 WATER QUALITY DATA																							
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
10	11	77	12	0.25	0		15	180	105	1.07	6.4		7	9	0	1.2	64	0.2					
11	16	77	8	0.03	7		4	255	121	1.29	6.4		6	7	0	1.3	72	0.1					
12	23	77	4	0.1			0	220	118	0.95	6.1		7	8	0	1.3	78	0.1					
2	2	78	0				25	144	85	1.15	6.5		5	6	0	1.0	52	0.1					
3	10	78	4	0.6			20	115	64	1.29	6.6		2	2	0	1.0	37	0.2					
4	4	78	13	0.1	7		2	163	101	1.18	6.6		7	9	0	1.1	60	0.1					
4	28	78	13	0.06	39*		8	144	89	1.09	6.8		7	8	0	0.9	54	0.1					
5	19	78	18	0.25	39*		15	158	89	1.24	6.9		11	13	0	1.0	49	0.1					
6	26	78	21	0.003	80*		25	260	151	1.22	6.2		22	27	0	1.6	86	0.1					
7	24	78	24	0.04	110*		230	246	149	1.30	7.2		11	13	0	1.4	83	1.0					
8	24	78	22	0.0000	23*		20	277	166	1.31	7.0		11	13	0	0.9	99	0.1					
10	12	78	16	0.0004	29*		10	319	187	1.09	7.5		13	16	0	1.3	120	0.3					
11	21	78	12	0.004	3		3	234	138	1.11	6.4	-1	8	10	0	1.7	85	0.0					
2	1	79	0	0.05	3		0	143	94	1.20	6.0		7	9	0	0.9	55	0.1					
3	6	79	6	0.06	3		4	128	82	1.02	6.5	-1	2	3	0	0.8	52	0.1					
1	10	79	10	0.1	10	0.00	10	128	84	1.23	6.9		7	9	0	0.8	49	0.0					
5	24	79	15	0.06	8	0.01	20	161	108	1.03	6.8	4	5	6	0	0.7	69	0.1					
6	27	79	14	0.01	10		5	166	107	1.24	7.3	-1	11	14	0	1.3	61	0.2	0.0	0.02	0.90	0.05	0.00
8	2	79	20	0.01	1		20	185	110	1.22	7.1	-12	14	17	0	1.2	61	0.2	0.0	0.01	0.70	0.05	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
----- MILLIGRAMS PER LITER -----																				
10 11 77	0.1	0.02	0.0	0.00	12	0.1	0.01	0.3	2.0	0.04	7.9	0.0	0.0	3.9	0.03	0.1	3.5	0.1	0.1	0.1
11 16 77	0.0	0.00			18	0.0	0.00	0.1	1.9		10	0.0		4.6	0.00	0.0	4.6		0.0	0.0
12 23 77	0.0	0.00			14	0.0	0.00	0.0	1.9		8.6	0.0		3.2	0.01	0.0	3.7		0.0	0.0
2 2 78	0.0	0.00	0.0	0.00	11	0.0	0.00	0.1	1.4	0.02	7.1	0.0	0.0	2.8	0.00	0.0	3.0	0.1	0.0	0.0
3 10 78	0.1	0.02			8.4	0.0	0.00	0.1	1.5		5.6	0.0		2.6	0.00	0.0	3.1		0.0	0.0
4 4 78	0.1	0.00	0.1	0.00	13	0.0	0.00	0.1	2.1	0.08	8.0	0.0	0.0	3.6	0.01	0.0	3.7	0.1	0.0	0.0
4 28 78	0.2	0.00			10	0.0	0.00	0.2	1.6		7.0	0.0		2.9	0.00	0.0	3.2		0.0	0.0
5 19 78	0.0	0.02			11	0.0	0.00	0.1	2.9		6.8	0.0		3.2	0.01	0.0	3.6		0.0	0.0
6 26 78	0.0	0.02			19	0.0	0.00	0.1	2.4		12	0.0		5.0	0.01	0.0	4.9		0.0	0.0
7 24 78	0.1	0.02	0.1	0.00	20	0.0	0.01	0.1	3.4	0.08	13	0.0	0.0	5.2	0.02	0.0	5.5	0.2	0.1	0.0
8 24 78	0.1	0.02			23	0.0	0.01	0.0	2.8		16	0.0		5.8	0.02	0.1	5.6		0.1	0.0
10 12 78	0.1	0.01	0.1	0.00	23	0.0	0.01	0.1	2.8	0.20	16	0.0	0.0	4.8	0.02	0.1	4.5	0.2	0.0	0.0
11 21 78	0.1	0.00			17	0.0	0.01	0.0	2.9		10	0.0		5.3	0.02	0.0	4.9		0.1	0.0
2 1 79	0.1	0.00	0.0	0.00	13	0.0	0.02	0.0	2.0	0.10	6.5	0.0	0.0	4.3	0.02	0.0	3.4	0.1	0.0	0.0
3 6 79	0.1	0.00			11	0.0	0.00	0.0	1.4		5.8	0.0		2.2	0.01	0.0	3.2		0.0	0.0
4 10 79	0.1	0.00	0.1	0.00	12	0.0	0.01	0.1	1.5	0.15	6.5	0.0	0.0	2.6	0.02	0.0	3.2	0.1	0.0	0.0
5 24 79	0.1	0.01			14	0.0	0.00	0.1	1.8		7.6	0.0		3.1	0.02	0.0	3.9		0.1	0.0
6 27 79	0.0	0.01			15	0.0	0.01	0.0	1.9		8.0	0.0		3.4	0.00	0.0	3.9		0.0	0.0
8 2 79	0.0		0.2	0.00	15	0.0		0.0	2.2	0.15	7.9	0.0	0.0	3.4	0.00	0.0	4.5	0.1	0.0	0.1

TABLE 27. WATER QUALITY FOR SITE 3072 ELLIOTT COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	MC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PD4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
10 11 77	15	0.01	23		8	408	234	1.07	6.5		12	15	0	2.0	150	0.7					
11 16 77	10	0.04	6		4	450	284	1.21	7.5		26	32	0	2.6	170	0.1					
12 23 77	6	0.025			0	605	472	1.05	7.0		30	36	0	1.8	310	0.3					
2 2 78	1	0.15			8	1060	810	1.09	7.1		19	23	0	1.2	560	1.3					
3 10 78	4	0.25			190	700	492	1.15	7.0		14	17	0	1.7	330	1.3					
4 4 78	14	0.15	12		2	1220	961	1.01	6.9		55	67	0	2.2	670	0.9					
4 28 78	17	0.06	34*		15	1090	823	1.07	8.0		39	46	0	1.7	560	2.2					
5 19 78	19	0.5	1690*		55	1290	905	1.12	7.6		30	36	0	1.5	610	2.9					
6 26 78	26	0.001	73*		35	909	650	1.20	7.4		58	71	0	1.8	420	0.1					
7 24 78	24	0.09	267*		3	1050	764	1.19	8.0		46	55	0	2.3	500	1.7					
8 24 78	22	0.002	59*		30	952	732	1.13	8.1		81	97	1	1.2	470	0.3					
10 12 78	16	0.009	55*		25	960	799	1.07	8.1		64	77	1	1.4	530	0.5					
11 21 78	12	0.01	29		1	954	650	1.32	7.9	-33	41	49	0	3.9	400	1.2					
2 1 79	0	0.15	25		10	1110	763	1.25	8.0		85	102	1	2.6	480	1.8					
3 6 79	7	0.05	26		15	1030	840	1.24	8.0	-80	90	108	1	2.3	530	1.8					
4 10 79	12	0.05	46	0.03	55	983	726	1.08	8.1		75	90	1	1.8	480	0.8					
5 24 79	16	0.025	50		85	1020	665	1.21	8.1	-74	79	94	1	2.0	420	0.4					
6 27 79	22	0.01	43		80	602	413	1.08	7.6	-46	54	66	0	2.0	270	0.4	0.0	0.04	1.40	0.15	0.00
8 2 79	24	0.01	64	0.01	350	431	241	1.57	7.8	-34	41	50	0	2.0	130	0.1	0.0	0.04	0.55	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 11 77	0.1	0.05	0.1	0.00	28	0.1	0.01	0.5	4.8	0.10	22	1.8	0.0	4.7	0.06	0.1	3.4	0.2	0.1	0.6
11 16 77	0.0	0.02			41	0.0	0.00	1.5	5.4		23	8.9		6.4	0.01	0.0	4.5		0.0	0.0
12 23 77	0.1	0.00			66	0.0	0.00	2.0	5.6		39	8.0		6.3	0.04	0.0	4.4		0.0	0.1
2 2 78	0.2	0.01	0.1	0.00	130	0.1	0.00	1.4	5.6	0.65	71	4.7	0.0	7.8	0.12	0.0	3.0	0.7	0.1	0.2
3 10 78	0.1	0.04			78	0.0	0.00	0.8	4.7		47	2.5		5.6	0.04	0.0	3.4		0.0	0.0
4 4 78	0.2	0.02	0.1	0.00	150	0.0	0.00	0.6	7.0	0.50	76	6.5	0.0	9.8	0.05	0.1	3.5	0.6	0.1	0.0
4 28 78	0.2	0.03			120	0.0	0.00	1.4	6.3		73	4.6		8.9	0.00	0.0	3.4		0.1	0.0
5 19 78	0.2	0.06			150	0.1	0.00	0.4	7.2		78	3.5		9.7	0.15	0.1	3.9		0.2	0.1
6 26 78	0.1	0.04			100	0.0	0.00	0.2	7.3		57	9.5		8.7	0.05	0.0	4.8		0.1	0.0
7 24 78	0.2	0.07	0.1	0.00	130	0.1	0.01	1.0	9.7	0.35	66	5.9	0.0	11	0.07	0.2	3.3	0.5	0.2	0.0
8 24 78	0.2	0.05			110	0.0	0.01	0.5	8.7		57	11		9.4	0.05	0.2	4.3		0.2	0.0
10 12 78	0.4	0.03	0.1	0.00	130	0.0	0.01	0.5	9.4	0.40	60	11	0.0	9.6	0.07	0.3	4.2	0.5	0.5	0.0
11 21 78	0.2	0.04			130	0.0	0.01	2.4	8.0		52	5.9		8.3	0.06	0.1	3.0		0.2	0.1
2 1 79	0.3	0.03	0.0	0.00	140	0.0	0.00	0.9	5.5	0.90	65	2.6	0.0	7.4	0.07	0.2	2.3	0.5	0.2	0.0
3 6 79	0.3	0.04			160	0.0	0.01	0.6	6.4		64	2.0		8.9	0.05	0.1	2.5		0.2	0.0
4 10 79	0.2	0.04			120	0.0	0.00	0.5	5.3		53	1.7		7.1	0.04	0.1	2.4		0.1	0.0
5 24 79	0.2	0.04			120	0.0	0.00	0.4	6.0		54	1.6		6.7	0.04	0.2	2.2		0.5	0.0
6 27 79	0.2	0.04			69	0.0	0.01	0.1	5.0		28	0.4		4.0	0.02	0.1	1.8		0.1	0.2
8 2 79	0.2	0.03	0.1	0.00	48	0.0	0.02	0.1	4.9	0.15	21	0.1	0.0	2.7	0.00	0.0	2.0	0.1	0.0	0.3

TABLE 28. WATER QUALITY FOR SITE 3073 ELLIOTT COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
10	11	77	19	0.008	0		10	2130	1770	0.81	4.3		0	0	0	2.3	1400	0.3					
11	16	77	10	0.02	8		4	2140	1610	0.92	4.0		0	0	0	1.2	1200	0.2					
12	23	77	6	0.015			0	1960	2020	0.80	3.8		0	0	0	3.4	1500	0.2					
2	2	78	1	0.2			10	2350	2230	0.85	3.5		0	0	0	1.3	1700	0.8					
3	10	78	3	0.25			3	1240	932	0.99	3.9		0	0	0	1.6	670	0.4					
4	4	78	12	0.09	4		4	2260	2100	0.95	3.9		0	0	0	2.4	1500	0.7					
4	28	78	13	0.07	33*		15	1510	1160	0.89	3.8		0	0	0	1.8	850	0.5					
5	19	78	16	0.1	22*		2	1860	1520	0.95	3.9		0	0	0	1.6	1100	0.5					
6	26	78	20	0.006	29*		0	2210	2080	0.85	3.8		0	0	0	2.1	1600	0.2					
7	24	78	20	0.07	53*		30	2110	1780	0.95	3.9		0	0	0	2.3	1300	0.5					
8	24	78	22	0.0000	17*		10	2200	2170	0.79	3.8		0	0	0	1.7	1700	0.1					
11	24	78	14	0.0002	23		0	1940	1650	0.98	4.1	130	0	0	0	2.3	1200	0.2					
2	1	79	0	0.07	14		1	2240	1800	0.94	3.8	220	0	0	0	2.0	1300	0.4					
3	6	79	6	0.06	7		6	1880	1670	0.92	3.9	150	0	0	0	1.4	1200	0.3					
4	10	79	9	0.1	13	0.00	0	1450	1270	0.83	3.9		0	0	0	1.1	960	0.2					
5	24	79	16	0.015	5		0	2370	1790	0.86	3.8	160	0	0	0	1.7	1400	0.1					
6	27	79	14	0.002	7		4	1800	1440	0.82	3.5	120	0	0	0	2.2	1100	0.1	0.0	0.03	1.05	0.15	0.00
8	2	79	18	0.006	0	0.01	8	1860	1340	0.83	3.6	110	0	0	0	2.2	1000	0.2	0.0	0.06	0.60	0.10	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 11 77	14	0.02	0.0	0.01	160	0.4	0.02	0.3	5.2	0.60	170	28	0.0	17	0.38	0.2	8.4	0.6	0.3	0.5
11 16 77	15	0.00			190	0.3	0.01	0.1	4.9		150	39		18	0.32	0.1	8.7		0.3	0.4
12 23 77	21	0.00			190	0.4	0.02	0.3	5.3		190	35		17	0.36	0.1	8.8		0.3	0.4
2 2 78	34	0.00	0.0	0.01	230	0.4	0.03	1.6	5.0	1.0	210	32	0.0	19	0.47	0.1	9.0	0.9	0.3	0.6
3 10 78	12	0.04			110	0.2	0.00	0.6	3.5		99	16		9.2	0.20	0.0	5.8		0.1	0.3
4 4 78	30	0.00	0.0	0.01	230	0.4	0.03	0.8	6.0	0.65	220	41	0.1	18	0.45	0.1	8.1	0.6	0.2	0.6
4 28 78	15	0.01			120	0.3	0.00	0.6	4.6		110	23		12	0.20	0.1	7.1		0.2	0.4
5 19 78	18	0.03			160	0.4	0.02	0.7	5.0		160	21		15	0.41	0.2	8.4		0.4	0.4
6 26 78	20	0.04			200	0.5	0.02	0.4	5.7		210	33		18	0.48	0.1	12		0.4	0.6
7 24 78	17	0.03	0.0	0.01	210	0.4	0.03	0.6	6.7	0.50	170	31	0.1	20	0.43	0.3	9.0	0.5	0.3	0.4
8 24 78	17	0.03			210	0.5	0.02	0.3	8.0		190	37		20	0.51	0.4	13		0.4	0.5
11 24 78	15	0.02			190	0.4	0.02	0.2	6.1		170	30		18	0.41	0.7	8.8		0.7	0.4
2 1 79	21	0.01	0.0	0.01	200	0.3	0.01	0.7	4.0	0.80	190	24	0.1	12	0.39	0.2	7.6	0.4	0.4	0.5
3 6 79	21	0.02			190	0.3	0.02	0.6	4.0		160	23		11	0.44	0.3	7.9		0.5	0.5
4 10 79	15	0.00			140	0.2	0.01	0.3	3.8		110	17		10	0.28	0.1	5.4		0.5	0.4
5 24 79	18	0.02			190	0.4	0.02	0.4	4.1		170	28		12	0.39	0.3	7.0		0.7	0.4
6 27 79	13	0.01			170	0.3	0.01	0.4	5.0		120	20		13	0.29	0.1	7.0		0.3	0.6
8 2 79	9.4	0.03	0.0	0.01	150	0.3	0.03	0.6	5.1	0.80	120	21	0.0	11	0.34	0.3	8.1	0.2	0.4	0.3

TABLE 29. WATER QUALITY FOR SITE 3081 FLOYD COUNTY, KENTUCKY

2002 TESTS COUNTY, KENTUCKY																						
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	CO3	CO3	CL	SD4	NO3 AS N	NO3 NO3 N	NO3 NH3 N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UN/CM	MG/L															
MILLIGRAMS PER LITER																						
8 4 77	22	0.002			15	142	79	1.90	7.3			22	27	0	1.2	32	0.1					
10 4 77	14	0.08		4	10	143	70	1.91	6.7			19	23	0	1.1	26	0.2					
11 10 77	12	0.3		23	20	132	99	1.67	6.7			17	21	0	1.5	45	0.0					
12 21 77	4	0.07			0	172	87	1.32	6.7			9	11	0	1.7	46	0.0					
1 31 78	1	0.1			15	123	70	1.60	6.7			11	14	0	1.5	32	0.1					
2 28 78	4	0.1			10	137	86	1.16	7.3			13	16	0	1.6	47	0.1					
3 30 78	10	0.4			15	128	79	1.34	7.0			12	15	0	2.6	38	0.1					
4 26 78	11	1.5	245			113	72	1.71	6.8			13	16	0	1.2	32	0.1					
5 18 78	15	0.04	32*		45	133	84	1.35	7.1			14	17	0	1.1	39	0.0					
6 21 78	21	0.025				123	79	1.52	7.3			21	26	0	2.0	32	0.2					
7 19 78	28	0.0000	96*		30	115	72	2.55	7.7			25	31	0	1.4	21	0.1					
8 23 78	22	0.002	41*		35	125	86	2.21	7.4			26	32	0	1.0	29	0.1					
10 5 78	20	0.0004	44*		20	132	84	2.08	7.6			33	40	0	0.6	29	0.0					
11 14 78	14	0.001	20		10	152	89	2.08	7.5			41	50	0	2.2	28	0.3					
12 28 78	2	0.07	6		0	122	91	1.18	7.1			13	16	0	1.4	48	0.1					
1 26 79	2	0.1	26		3	94	56	1.58	7.1			8	10	0	1.9	24	0.1					
2 28 79	6	0.15	3		9	95	64	1.34	6.8	-6		8	10	0	0.8	32	0.1					
4 4 79	12	0.2	39		35	91	62	1.30	6.9			10	12	0	0.9	30	0.1					
5 22 79	16	0.004	22		35	134	83	1.63	7.4	-13		20	25	0	2.6	35	0.1					
6 21 79		0.07	31*			130	78	1.75	7.5	-17		20	24	0	0.7	32	0.0					
7 26 79	21	0.01	24		65	143	86	1.89	7.5	-22		25	31	0	1.6	32	0.1	0.0	0.01	0.55	0.05	0.01
9 6 79	22	0.02	7		20	133	86	1.59	7.5	-17		23	28	0	1.3	36	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	NH	NO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
MILLIGRAMS PER LITER																				
8 4 77	0.0	0.00			10	0.0	0.00	0.1	2.4		5.7	0.0		5.3	0.02	0.0	4.0		0.0	0.1
10 4 77	0.1	0.00	0.0	0.00	8.1	0.1	0.02	0.2	2.2	0.03	5.1	0.2	0.0	4.5	0.05	0.1	4.7	0.1	0.1	0.0
11 10 77	0.1				14	0.0	0.00	0.1	2.5		7.2	0.0		5.3	0.01	0.0	5.9		0.1	0.0
12 21 77	0.0	0.00			11	0.0	0.00	0.1	2.1		6.4	0.1		4.4	0.01	0.0	4.8		0.0	0.0
1 31 78	0.0	0.00	0.0	0.00	9.0	0.0	0.00	0.1	1.5	0.00	5.4	0.0	0.0	4.4	0.00	0.0	4.1	0.1	0.0	0.0
2 28 78	0.1	0.00			9.6	0.0	0.01	0.0	1.7		5.8	0.0		4.3	0.02	0.1	3.2		0.1	0.0
3 30 78	0.1	0.01			9.4	0.0	0.00	0.0	1.7		5.4	0.0		4.1	0.01	0.0	4.6		0.1	0.0
4 26 78	0.3	0.00	0.0	0.00	9.8	0.1	0.01	0.2	2.4	0.08	5.7	0.1	0.0	3.6	0.03	0.1	3.8	0.1	0.2	0.0
5 18 78	0.0	0.01			9.9	0.0	0.00	0.1	1.9		5.5	0.0		4.3	0.01	0.0	4.8		0.0	0.0
6 21 78	0.0	0.00	0.0	0.00	8.8	0.0	0.00	0.0	1.8	0.00	5.1	0.0	0.0	4.4	0.00	0.0	5.2	0.1	0.0	0.0
7 19 78	0.1	0.01	0.0	0.00	10	0.0	0.00	0.2	2.7	0.04	5.2	0.2	0.1	3.8	0.00	0.1	5.1	0.1	0.2	0.0
8 23 78	0.0	0.01			12	0.0	0.01	0.2	2.5		6.4	0.2		4.9	0.02	0.1	6.1		0.1	0.0
10 5 78	0.0	0.00	0.0	0.00	11	0.0	0.00	0.1	2.8	0.04	5.9	0.0	0.0	4.2	0.00	0.0	5.1	0.1	0.0	0.0
11 14 78	0.1	0.00			12	0.0	0.00	0.1	2.3		5.9	0.1		3.8	0.01	0.0	4.6		0.1	0.0
12 28 78	0.1	0.00			11	0.0	0.00	0.1	1.9		5.3	0.1		4.6	0.00	0.0	4.8		0.0	0.0
1 26 79	0.1	0.00			7.9	0.0	0.00	0.1	1.4		3.9	0.0		2.4	0.03	0.0	4.4		0.0	0.0
2 28 79	0.1	0.00			8.2	0.0	0.00	0.1	1.5		4.3	0.0		2.8	0.01	0.0	4.0		0.0	0.0
4 4 79	0.1	0.01	0.0	0.00	7.4	0.0	0.00	0.1	1.8	0.05	3.7	0.0	0.0	2.9	0.01	0.0	4.1	0.1	0.0	0.0
5 22 79	0.0	0.00			11	0.0	0.01	0.1	2.0		5.8	0.1		4.3	0.01	0.0	4.4		0.0	0.0
6 21 79	0.2	0.00	0.0	0.00	11	0.0	0.00	0.2	2.1	0.15	5.4	0.1	0.0	3.6	0.00	0.0	4.7	0.1	0.0	0.1
7 26 79	0.0		0.0	0.00	12	0.0		0.1	2.4	0.09	5.9	0.2	0.0	4.4	0.00	0.0	5.3	0.1	0.0	0.3
9 6 79	0.1	0.01			11	0.0	0.01	0.1	2.2		5.4	0.1		3.7	0.02	0.1	5.6		0.0	0.0

TABLE 30. WATER QUALITY FOR SITE 3082 FLOYD COUNTY, KENTUCKY

DATE		WATER EST		SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB ACID-ALKA-		CO3	CL	NO3 #NO3 NH3			TOT N	TOT P	ORTH PO4	
MO	DA	TEMP	DISCH						PH	ITY			AS N	AS N	AS N				
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER									
8	4	77	24	0.03			10	946	663	1.15	7.7	54	66	0	1.7	450	0.2		
10	4	77	14	0.3	0		4	762	528	1.04	6.9	39	48	0	1.4	370	0.3		
11	10	77	9	0.25	82		75	613	475	1.38	7.0	44	54	0	1.7	300	0.0		
12	21	77	3	0.2			0	682	571	1.02	7.2	37	45	0	2.0	400	0.1		
1	31	78	1	0.25			10	620	416	1.33	7.5	43	52	0	1.5	260	0.2		
2	28	78	4	0.6			10	617	384	1.11	7.7	33	40	0	1.8	260	0.2		
3	30	78	12	0.9			15	525	354	1.32	7.7	38	46	0	1.3	220	0.2		
4	26	78	11	1.5	641			391	241	1.61	6.6	27	33	0	1.2	140	0.3		
5	18	78	18	0.3	39*		40	656	448	1.21	7.6	48	58	0	1.4	290	0.1		
6	21	78	24	0.1				721	459	1.19	7.5	35	43	0	1.4	310	0.1		
7	19	78	31	0.07	43*		20	817	578	1.05	7.9	32	39	0	1.7	410	0.0		
8	23	78	22	0.01	21*		10	711	497	1.27	7.8	39	48	0	1.1	320	0.0		
10	5	78	20	0.06	22*		0	945	773	1.01	7.8	43	52	0	0.7	550	0.1		
11	14	78	16	0.07	2		1	952	640	1.14	7.8	45	54	0	2.0	440	0.0		
12	28	78	2	0.1	27		20	581	388	1.23	7.7	-30	39	48	0	1.4	250	0.3	
1	26	79	1	0.4	10		10	585	437	1.29	7.8	-34	36	44	0	1.1	280	0.2	
2	28	79	7	0.3	53		95	553	375	1.34	7.7	-30	34	41	0	0.8	240	0.2	
4	4	79	14	1.0	2010		3000	438	295	1.25	7.5		25	30	0	1.3	190	0.2	
5	22	79	17	0.05	28		20	371	213	1.51	7.9	-42	50	60	0	0.7	120	0.1	
6	21	79		0.25	10000	130	25000	672	380	1.17	6.9	2	7	9	0	1.6	260	0.3	
7	26	79	22	0.09	1290	0.85	4600	438	234	1.26	7.7	-21	31	38	0	1.1	150	0.3	
8	6	79														1.1	130	0.1 0.0 0.01	
9	6	79	26	0.1	7		10	730	466	1.07	7.5	-46	52	64	0	1.4	310	0.1	

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 4 77	0.1	0.02			80	0.0	0.00	0.2	7.0		74	0.9		12	0.04	0.1	1.2		0.1	0.1
10 4 77	0.1	0.01	0.0	0.00	57	0.1	0.02	0.1	4.8	0.20	57	0.2	0.0	7.7	0.07	0.2	3.0	0.4	0.2	0.0
11 10 77	0.1				66	0.0	0.00	0.2	5.2		59	0.6		8.4	0.03	0.0	3.7		0.1	0.0
12 21 77	0.1	0.00			64	0.0	0.00	0.1	4.7		61	0.4		6.8	0.03	0.0	3.3		0.2	0.0
1 31 78	0.0	0.00	0.1	0.00	53	0.0	0.00	0.1	3.3	0.20	54	0.3	0.0	6.3	0.00	0.0	3.0	0.3	0.0	0.0
2 28 78	0.1	0.00			37	0.0	0.01	0.0	3.6		47	0.2		6.5	0.03	0.1	2.3		0.1	0.0
3 30 78	0.1	0.02			43	0.0	0.00	0.0	3.5		45	0.3		5.9	0.02	0.0	3.7		0.1	0.0
4 26 78	0.3	0.01	0.0	0.00	25	0.1	0.01	0.2	3.8	0.08	39	0.2	0.0	4.4	0.04	0.1	2.6	0.2	0.2	0.0
5 18 78	0.1	0.01			53	0.0	0.00	0.1	4.3		53	0.3		6.8	0.02	0.0	3.4		0.1	0.0
6 21 78	0.1	0.01	0.1	0.00	57	0.0	0.00	0.1	4.6	0.20	53	0.0	0.0	7.7	0.03	0.0	2.7	0.4	0.1	0.0
7 19 78	0.1	0.03	0.1	0.00	70	0.0	0.00	0.1	6.3	0.25	60	0.1	0.1	7.7	0.00	0.1	2.8	0.4	0.3	0.0
8 23 78	0.2	0.02			70	0.0	0.01	0.2	6.4		55	0.1		9.1	0.04	0.1	3.7		0.2	0.0
10 5 78	0.2	0.00	0.1	0.00	96	0.0	0.01	0.1	6.5	0.25	75	0.1	0.0	11	0.05	0.2	3.3	0.5	0.2	0.0
11 14 78	0.1	0.00			89	0.0	0.00	0.0	4.6		66	0.0		9.7	0.03	0.1	2.4		0.1	0.0
12 28 78	0.1	0.00			54	0.0	0.00	0.1	2.8		42	0.4		5.9	0.00	0.0	2.9		0.0	0.0
1 26 79	0.1	0.00			65	0.0	0.01	0.1	4.1		48	0.2		6.4	0.02	0.0	3.8		0.0	0.0
2 28 79	0.1	0.01			53	0.0	0.01	0.1	3.3		46	0.2		4.6	0.02	0.0	2.8		0.1	0.0
4 4 79	0.1	0.01			39	0.0	0.00	0.2	3.2		35	0.2		3.9	0.02	0.0	2.4		0.1	0.0
5 22 79	0.1	0.00			24	0.0	0.00	0.1	3.4		27	0.9		4.4	0.03	0.0	3.2		0.1	0.0
6 21 79	0.2	0.03			42	0.0	0.00	0.1	5.5		49	2.9		4.9	0.05	0.1	2.3		0.1	0.0
7 26 79	0.1	0.01			25	0.0	0.09	0.0	5.3		28	0.0		5.3	0.01	0.0	2.1		0.0	0.0
8 6 79	0.2	0.02			30	0.0	0.00	0.1	3.8		28	0.0		3.7	0.00	0.0	2.6		0.1	0.3
9 6 79	0.1	0.02			62	0.2	0.00	0.1	3.4		44	0.0		4.4	0.07	0.2	2.2		0.6	0.0

TABLE 31. WATER QUALITY FOR SITE 3083 FLOYD COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
8	4	77	23	0.04			10	327	180	1.51	7.8		37	45	0	1.4	100	0.1					
10	4	77	14	0.15	2		8	370	193	1.58	6.6		47	57	0	1.3	100	0.3					
11	10	77	9	0.3	54		25	396	257	1.50	7.0		44	54	0	1.4	140	0.1					
12	21	77	4	0.15			4	385	213	1.65	7.5		44	54	0	1.5	110	0.2					
1	31	78	1	0.1			30	340	217	1.46	7.4		39	48	0	1.5	120	0.3					
2	28	78	4	0.3			750	436	249	1.32	7.8		37	45	0	1.6	150	0.3					
3	30	78	13	0.6			80	338	221	1.49	7.8		38	46	0	1.5	120	0.2					
4	26	78	11	1.0	1450			287	179	1.37	6.8		23	28	0	1.1	110	0.3					
5	18	78	16	0.3	1760*		2700	412	269	1.24	7.5		39	48	0	1.4	170	0.3					
6	21	78	23	0.07				310	187	1.62	7.6		46	56	0	2.1	96	0.3					
7	19	78	26	0.1	151*		90	291	175	1.77	7.9		51	61	0	1.3	84	0.2					
8	23	78	22	0.005	880*		3000	353	275	1.27	7.7		59	72	0	1.3	160	0.2					
10	5	78	20	0.07	23*		8	280	150	1.69	7.6		32	39	0	1.9	75	0.1					
11	14	78	16	0.05	4		5	244	149	1.72	8.1		59	71	1	1.6	66	0.0					
12	28	78	2	0.06	12		15	305	171	1.72	7.6	-38	52	63	0	1.3	81	0.1					
1	26	79	0	0.2	97		110	383	267	1.18	7.6	-26	30	36	0	0.9	170	0.3					
2	28	79	7	0.4	1060		900	411	316	1.00	7.5	-15	21	26	0	0.8	220	0.4					
4	4	79	13	1.0	1980		2800	281	171	1.38	7.3		19	23	0	1.3	100	0.4					
5	22	79	17	0.07			3	897	631	1.40	7.9	-30	45	54	0	0.9	410	0.0					
6	21	79		0.25	88	0.65	150	873	737	1.10	7.7	-49	57	68	0	5.8	500	0.1					
7	26	79	22	0.2	243		380	1010	623	1.08	7.8	-32	39	47	0	2.0	430	0.2	0.0	0.06	0.65	0.05	0.01
9	6	79	25	0.07	552		2100	413	264	1.58	8.0	-50	61	73	0	1.3	140	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 ms/l too high (most are 20 to 40 ms/l too high).

DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN	
MO	DA	YR	MILLIGRAMS PER LITER																			
8	4	77	0.0	0.00		22	0.0	0.00	0.1	4.2		21	0.0		5.9	0.03	0.0	1.2		0.0	0.0	
10	4	77	0.1	0.00	0.0	0.00	21	0.1	0.02	0.1	4.2	0.08	24	0.2	0.0	4.7	0.07	0.1	3.0	0.1	0.2	0.0
11	10	77	0.1	0.01		35	0.0	0.00	0.3	4.9		29	0.8		6.0	0.01	0.0	3.6		0.0	0.0	
12	21	77	0.1	0.00		26	0.0	0.00	0.2	3.5		28	1.1		4.9	0.01	0.0	3.4		0.1	0.0	
1	31	78	0.0	0.00	0.0	0.00	23	0.0	0.00	0.7	3.1	0.08	28	1.1	0.0	4.3	0.01	0.0	3.2	0.2	0.0	0.0
2	28	78	0.1	0.00		25	0.0	0.01	0.3	3.9		33	0.8		5.0	0.04	0.1	2.2		0.0	0.0	
3	30	78	0.1	0.00		24	0.0	0.00	0.2	3.5		30	0.9		4.5	0.02	0.0	3.7		0.1	0.0	
4	26	78	0.3	0.00	0.0	0.00	17	0.0	0.00	0.3	3.6	0.03	24	0.5	0.0	3.7	0.01	0.0	3.4	0.1	0.0	0.0
5	18	78	0.1	0.02		26	0.0	0.00	0.1	4.1		33	1.1		5.1	0.03	0.0	3.5		0.1	0.0	
6	21	78	0.1	0.02	0.0	0.00	20	0.0	0.00	0.1	3.8	0.00	25	0.2	0.0	4.5	0.02	0.0	3.0	0.2	0.1	0.0
7	19	78	0.1	0.02	0.0	0.00	19	0.0	0.00	0.1	4.2	0.10	23	0.2	0.0	4.2	0.00	0.0	3.0	0.1	0.0	0.0
8	23	78	0.4	0.02		32	0.0	0.02	0.7	5.3		27	1.5		5.7	0.04	0.1	4.8		0.1	0.0	
10	5	78	0.1	0.01	0.0	0.00	20	0.0	0.00	0.1	3.9	0.08	17	0.2	0.0	4.3	0.02	0.0	3.2	0.1	0.0	0.0
11	14	78	0.1	0.00		17	0.0	0.01	0.0	3.2		15	0.0		5.0	0.01	0.0	2.5		0.1	0.1	
12	28	78	0.1	0.01		22	0.1	0.01	0.4	2.9		19	0.9		3.9	0.08	0.1	3.5		0.3	0.1	
1	26	79	0.1	0.00		33	0.0	0.00	0.5	3.3		28	1.0		4.0	0.04	0.0	4.0		0.1	0.0	
2	28	79	0.1	0.01		34	0.0	0.03	0.1	3.2		32	0.7		4.0	0.03	0.0	3.0		0.0	0.0	
4	4	79	0.1	0.00		17	0.0	0.00	0.1	3.3		24	0.5		3.2	0.01	0.0	2.7		0.0	0.0	
5	22	79	0.1	0.03		95	0.0	0.00	0.1	5.9		80	0.0		9.5	0.03	0.1	3.1		0.2	0.0	
6	21	79	0.3	0.02		91	0.0	0.00	0.0	6.0		82	0.1		7.5	0.00	0.1	2.9		0.3	0.0	
7	26	79	0.2	0.03	0.1	0.00	84	0.0	0.04	0.1	5.1	0.25	62	0.1	0.0	8.4	0.00	0.1	2.6	0.3	0.2	0.0
9	6	79	0.1	0.03		38	0.0	0.00	0.0	3.8		31	1.1		3.7	0.02	0.1	3.1		0.1	0.0	

TABLE 32. WATER QUALITY FOR SITE 3090 GREENUP COUNTY, KENTUCKY

															NO3					NH3			TOT	TOT	ORTH	
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	AS N	AS N	AS N	AS N	N	P	PO4				
															----- MILLIGRAMS PER LITER -----											
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L						28	34	0	1.3	58	0.1						
5	25	77	18	0.015			8	143	123	1.56	6.8															
DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN					
MO DA YR		----- MILLIGRAMS PER LITER -----																								
5	25	77	0.0	0.02		17	0.0	0.01	0.1	2.3		9.0	0.4		7.2	0.02	0.0	4.6		0.0	0.0					

TABLE 33. WATER QUALITY FOR SITE 3091 GREENUP COUNTY, KENTUCKY

----- MILLIGRAMS PER LITER -----																						
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L															
6 27 77	24	0.0000			0	126	65		6.7			10	12	0		32	0.1					
9 26 77	22	0.0000			15	149	89	1.65	7.0			30	37	0	1.2	35	0.0					
11 21 77	10	0.05	11		4	127	67	1.08	6.4			6	7	0	1.7	37	0.3					
12 27 77	2	0.2			10	123	72	1.16	6.4			4	5	0	1.5	40	0.2					
2 21 78	2	0.3			3	124	70	1.18	6.4			2	3	0	1.2	39	0.2					
3 22 78	8	0.25			4	103	61	1.08	6.2			2	2	0	1.3	35	0.2					
4 19 78	13	0.6	27		20	108	68	1.09	6.2			1	1	0	1.0	40	0.1					
5 25 78	15	0.25	21*		10	98	65	1.09	6.6	4		2	2	0	0.7	36	0.1					
7 28 78	22	0.03	95*		85	115	72	1.27	7.2			13	16	0	0.9	36	0.0					
3 6 79	9	0.06	16		2	87	60	1.10	6.3	2		2	3	0	0.8	34	0.1					
4 11 79	9	0.15	22	0.00	10	98	66	0.98	6.3			2	2	0	1.0	39	0.1					
5 25 79	15	0.05	7		0	98	63	1.15	6.4	5		1	1	0	0.7	36	0.1					
6 28 79	19	0.02	15		15	86	58	1.00	6.2	6		2	3	0	1.4	32	0.1	0.0	0.01	1.00	0.00	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 27 77	0.0	0.01			5.3	0.0	0.01	0.1	2.0		5.6	0.4		2.7	0.01	0.0	5.0		0.1	0.0
9 26 77	0.0	0.01	0.0	0.00	9.2	0.0	0.00	0.2	2.3	0.04	7.0	2.7	0.0	3.2	0.03	0.0	4.3	0.1	0.0	0.0
11 21 77	0.1	0.00			6.7	0.0	0.00	0.0	1.9		4.8	0.1		2.7	0.00	0.0	3.7		0.0	0.1
12 27 77	0.0	0.00	0.1	0.00	6.9	0.0	0.00	0.0	1.5	0.03	6.2	0.1	0.0	2.6	0.00	0.0	4.5	0.1	0.0	0.0
2 21 78	0.0	0.01			6.8	0.0	0.00	0.1	1.5		6.3	0.0		2.6	0.00	0.0	4.8		0.0	0.0
3 22 78	0.0	0.02			5.7	0.0	0.00	0.0	1.4		5.2	0.0		1.9	0.01	0.0	4.2		0.0	0.0
4 19 78	0.1	0.00	0.0	0.00	6.2	0.0	0.00	0.1	1.6	0.04	5.9	0.1	0.0	2.3	0.01	0.0	4.7	0.0	0.1	0.0
5 25 78	0.1	0.01	0.0	0.00	5.9	0.0	0.00	0.2	1.7	0.07	5.0	0.1	0.1	2.3	0.01	0.0	5.0	0.0	0.0	0.0
7 28 78	0.0	0.02			7.6	0.0	0.00	0.1	1.9		5.5	0.3		2.0	0.00	0.0	4.6		0.0	0.0
3 6 79	0.1	0.01			6.2	0.0	0.00	0.0	1.6		4.7	0.0		1.7	0.02	0.0	4.2		0.0	0.0
4 11 79	0.1	0.00	0.1	0.00	6.2	0.0	0.00	0.0	1.5	0.20	4.9	0.0	0.0	2.0	0.02	0.0	4.3	0.1	0.1	0.0
5 25 79	0.0	0.01			6.3	0.0	0.00	0.0	1.6		5.2	0.1		2.1	0.02	0.0	4.8		0.0	0.0
6 28 79	0.0	0.01			5.4	0.0	0.01	0.0	1.6		4.0	0.1		1.7	0.01	0.0	4.6		0.0	0.0

TABLE 34. WATER QUALITY FOR SITE 3092 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 N	NO3 AS	NH3 N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER					
5 25 77	23	0.015			35	429	316	1.41	6.3		14	17	0	4.3	190	0.1	
6 27 77	26	0.015			15	729	480	1.00	6.0		8	10	0	2.6	340	0.1	
11 21 77	11	0.01	11		4	690	441	1.00	6.1		4	5	0	2.2	310	0.5	
12 27 77	3	0.01			20	542	349	0.90	5.9		3	4	0	2.3	250	0.2	
2 21 78	2	0.03			4	515	347	1.09	5.2		0	0	0	2.0	230	0.1	
3 22 78	10	0.15			4	734	508	0.95	4.3		0	0	0	1.9	370	0.1	
4 19 78	15		193		650	1620	1190	0.74	3.0		0	0	0	2.1	860	0.4	
5 25 78	23	0.2	1670*		3100	2790	2020	0.68	2.9		0	0	0	2.4	1400	0.1	
10 2 78	19	0.08	240*		230	2480	2250	1.02	7.8		50	60	0	6.2	1600	0.3	
11 3 78	12	0.002	21		70	1870	1550	0.97	4.2	46	0	0	0	19	1100	0.3	
12 8 78	8	0.3	9		35	1420	866	0.88	3.1	160	0	0	0	6.2	610	0.4	
2 16 79	1	0.08			270	913	601	0.96	3.7	80	0	0	0	3.3	420	0.7	
3 6 79	10	0.15	211		120	1330	919	1.05	3.5	120	0	0	0	3.0	630	0.6	
4 11 79	10	0.25	329	0.12	260	1280	1030	0.94	6.7		4	5	0	2.3	750	1.2	
5 25 79	16	0.02	51		40	1810	1400	0.85	3.3	140	0	0	0	4.0	1000	0.4	
6 28 79	29	0.004	52		40	2380	1520	0.65	2.9	310	0	0	0	3.7	1100	6.5	0.9
8 1 79	31	0.03	20	0.01	130	1480	930	0.85	3.5	30	0	0	0	3.2	630	12	1.0
																5.50	8.15
																0.15	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 25 77	0.1	0.04			51	0.0	0.00	0.2	4.1		32	4.0		12	0.05	0.0	3.1		0.1	0.7
6 27 77	0.3	0.06			61	0.1	0.00	0.3	4.6		41	4.4		13	0.08	0.3	2.9		0.2	0.3
11 21 77	0.2	0.00			64	0.1	0.00	0.4	4.7		32	7.4		12	0.08	0.0	3.1		0.0	0.3
12 27 77	0.6	0.03	0.0	0.00	34	0.0	0.00	0.8	3.6	0.20	30	4.1	0.0	10	0.12	0.0	6.3	0.6	0.0	0.4
2 21 78	1.2	0.07			46	0.1	0.00	0.8	3.6		30	3.4		13	0.09	0.0	5.7		0.1	0.2
3 22 78	2.5	0.06			67	0.1	0.00	1.2	4.2		41	2.6		10	0.16	0.0	4.6		0.0	0.3
4 19 78	27	0.07	0.1	0.02	130	1.3	0.10	19	7.2	0.70	72	20	0.1	11	0.97	0.1	6.9	2.2	0.2	19
5 25 78	49	0.15	0.1	0.04	210	1.5	0.36	140	7.6	0.65	110	17	0.1	20	1.8	0.2	11	4.2	0.4	4.5
10 2 78	0.7	0.20	0.1	0.00	340	0.3	0.01	0.2	13	0.70	140	10	0.0	120	0.38	0.4	3.3	4.9	0.6	0.0
11 3 78	5.7	0.14			230	0.4	0.03	4.3	18		100	12		50	0.65	0.2	5.3		0.3	1.0
12 8 78	14	0.05			120	0.6	0.11	20	9.2		56	7.4		8.4	0.73	0.4	4.6		0.4	1.8
2 16 79	10	0.04			93	0.3	0.05	7.0	5.1		40	4.6		8.7	0.37	0.2	3.7		0.5	0.6
3 6 79	14	0.09			160	0.4	0.09	8.5	5.9		67	0.6		11	0.56	0.2	5.1		0.3	0.7
4 11 79	0.2	0.11			180	0.1	0.01	0.6	6.4		65	3.0		12	0.21	0.1	2.2		0.4	0.2
5 25 79	19	0.11			210	0.8	0.07	4.7	11		81	12		22	1.2	0.1	6.2		0.2	3.5
6 28 79	27	0.12			170	1.8	0.19	32	7.8		75	11		14	1.9	0.2	9.0		0.3	5.3
8 1 79	1.4	0.08	0.1	0.00	140	0.4	0.05	11	7.3	0.75	56	5.4	0.0	12	0.39	0.1	4.1	0.6	0.2	0.8

TABLE 35. WATER QUALITY FOR SITE 3093 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L								MILLIGRAMS PER LITER							
6 27 77	24	0.005			65	243	137	1.50	7.6			42	51	0	1.8	63	0.0				
9 26 77	20	0.0008			40	424	251	1.51	7.4			44	54	0	1.5	130	0.0				
11 21 77	10	0.02	14		4	248	135	1.32	7.7			20	24	0	1.9	73	0.2				
12 27 77	0	0.1			20	219	136	1.13	7.3			13	16	0	1.7	80	0.3				
2 21 78	1	0.08			0	329	190	1.24	7.1			10	12	0	4.0	110	0.1				
3 22 78	8	0.15			160	189	104	1.12	7.0			8	10	0	1.4	61	0.1				
4 19 78	13	0.5	91		260	240	147	1.14	7.1			15	18	0	1.6	86	0.1				
5 25 78	15	0.9	56*		85	339	198	1.03	6.3			8	10	0	1.3	130	1.0				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 27 77	0.1	0.02			15	0.1	0.00	0.1	2.7		9.1	0.1		10	0.02	0.3	4.3		0.1	0.0
9 26 77	0.0	0.03	0.2	0.00	35	0.0	0.00	0.2	3.9	0.15	23	2.2	0.0	11	0.03	0.0	6.5	0.5	0.0	0.0
11 21 77	0.1	0.00			18	0.0	0.00	0.1	2.2		8.6	0.3		9.7	0.00	0.0	3.6		0.0	0.1
12 27 77	0.1	0.00	0.1	0.00	16	0.0	0.00	0.1	1.9	0.09	10	0.2	0.0	6.5	0.02	0.1	4.4	0.3	0.1	0.0
2 21 78	0.1	0.05			26	0.0	0.00	0.1	2.4		17	0.4		8.5	0.01	0.0	5.1		0.0	0.0
3 22 78	0.1	0.02			12	0.0	0.00	0.1	2.1		7.8	0.4		4.0	0.02	0.0	4.1		0.0	0.0
4 19 78	0.2	0.01	0.1	0.00	18	0.0	0.00	0.3	2.2	0.15	11	1.8	0.0	5.8	0.00	0.0	4.7	0.2	0.0	0.0
5 25 78	0.1	0.03	0.1	0.00	26	0.0	0.00	0.2	3.2	0.15	13	1.4	0.0	7.3	0.06	0.0	3.7	0.4	0.0	0.1

TABLE 36. WATER QUALITY FOR SITE 3094 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L								MILLIGRAMS PER LITER							
2 16 79	2	0.4	5		2	78	53	1.26	5.6	1	0	0	0	0.8	29	0.1					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
2 16 79	0.1	0.01			5.9	0.0	0.01	0.0	1.2		4.8	0.0		1.4	0.03	0.0	4.5		0.2	0.0

TABLE 37. WATER QUALITY FOR SITE 3095 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
MILLIGRAMS PER LITER																					
6 29 78	27	0.07			0	453	282	1.92	7.5		120	145	0	2.2	100	0.9					
7 28 78	25	0.7	217*		80	1030	622	0.79	3.3		0	0	0	2.2	450	1.4					
8 28 78	29	0.004	69*		55	693	509	1.28	7.9		64	77	0	2.5	300	0.5					
10 2 78	19	0.003	251*		950	50000	45500	303	10.5		41100	2520	23400	52	140	0.1					
11 3 78	11	0.004	138		150	1160	722	2.83	10.2		308	113	129	9.3	230	0.5					
12 8 78	8	0.3	89		95	388	272	1.13	5.7	9	1	1	0	2.6	180	1.3					
2 16 79	0	0.5	70		75	588	401	1.27	7.4	-20	21	26	0	2.0	250	2.3					
3 6 79	9	0.1	20		20	569	354	1.29	7.2	-17	18	22	0	1.7	220	1.2					
4 11 79	9	0.1	23	0.00	10	920	705	1.02	7.7		34	42	0	2.3	480	2.7					
5 25 79	15	0.02	55		140	648	463	1.34	7.6	-28	39	48	0	2.0	280	0.9					
6 28 79	21	0.02	12		30	504	332	1.18	7.1	2	12	15	0	1.4	220	1.2	0.2	0.40	2.20	0.00	0.01
8 1 79	29	0.02	29		95	445	312	0.96	7.1	-3	11	14	0	1.4	220	0.5	0.0	0.02	0.50	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 29 78	0.0	0.04			36	0.1	0.00	0.5	9.3		22	13		9.3	0.01	0.0	4.9		0.2	0.2
7 28 78	5.8	0.07			78	0.2	0.07	5.0	6.4		38	8.9		8.1	0.31	0.1	4.2		0.1	4.5
8 28 78	0.2	0.05			82	0.1	0.01	0.1	9.6		38	16		12	0.07	0.2	4.2		0.1	0.0
10 2 78	0.4	0.14			16	0.0	0.03	0.2	21		30	0.6	21000	0.06	0.3	6.2		0.5	0.0	
11 3 78	0.3	0.03			56	0.0	0.00	0.0	8.2		20	3.0	210	0.03	0.1	2.3		0.1	0.0	
12 8 78	0.2	0.03			45	0.1	0.00	0.6	3.6		22	1.6		4.2	0.09	0.2	2.2		0.2	0.2
2 16 79	0.2	0.04	0.1	0.00	73	0.1	0.00	0.8	3.4	0.45	33	2.5	0.0	6.8	0.08	0.1	2.7	0.8	0.1	0.1
3 6 79	0.1	0.03	0.1	0.00	69	0.0	0.00	0.4	3.2	0.25	28	2.4	0.0	5.7	0.07	0.0	2.5	0.7	0.1	0.1
4 11 79	0.2	0.07			110	0.1	0.00	0.2	4.9		52	3.3		11	0.11	0.2	2.2		0.5	0.0
5 25 79	0.1	0.03			90	0.0	0.00	0.1	4.4		37	3.9		9.9	0.02	0.0	2.2		0.0	0.0
6 28 79	0.1	0.05			60	0.0	0.01	0.2	4.1		25	1.9		6.1	0.05	0.1	2.3		0.1	0.1
8 1 79	0.1	0.04	0.2	0.00	48	0.0	0.01	0.1	3.0	0.20	22	1.3	0.0	4.8	0.02	0.0	2.1	0.2	0.0	0.3

TABLE 38. WATER QUALITY FOR SITE 3098 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UN/CM	MG/L														
6 28 79	22	0.2		76		1540 1030	1.21	8.1		71 85	1	4.0	650	7.6						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
6 28 79	1.5	0.22			190	0.0	0.00	0.1	8.5		74	0.0		23	0.05	0.3	0.9		0.6	0.0

TABLE 39. WATER QUALITY FOR SITE 3099 GREENUP COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UN/CM	MG/L														
5 25 77	20	0.09			15	333 237	1.79	6.9		67 82	0	3.9	110	0.3						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
5 25 77	0.1	0.03			37	0.0	0.00	0.0	3.6		24	0.1		9.0	0.02	0.0	2.0		0.1	0.0

TABLE 40. WATER QUALITY FOR SITE 3101 HARLAN COUNTY, KENTUCKY

WATER																		EST										SUSP										SETT										SPEC										DIS										NEUT										LAB										ACID-										ALKA-										NO3										NH3										TOT										TOT										ORTH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
DATE				TEMP				DISCH				SOL				MATTER				TURB				COND				SOLID				RATIO				PH				ITY				LINITY				HCO3				CO3				CL				SO4				AS				N				AS				N				AS				N				TOT				N				P				PO4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
MO				DA				YR				DEG				C				CFS				MG/L				ML/L				JTU				UM/CM				MG/L				----- MILLIGRAMS PER LITER -----																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
6				30				77				18				0.07								8				23				17				1.54				5.9								2				3				0				0.7				4				0.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 30 77	0.0	0.00			1.0	0.0	0.00	0.0	0.6		1.1	0.0		0.8	0.00	0.0	2.1		0.0	0.0
7 27 77	0.1	0.01			1.1	0.1	0.00	0.0	1.0		1.2	0.0		0.9	0.03	0.4	2.4		0.1	0.0
8 24 77	0.0				1.2	0.0	0.00	0.1	0.7		1.0	0.0		0.6	0.02	0.0	2.5		0.0	0.0
9 28 77	0.0	0.01			1.9	0.0	0.00	0.0	0.7		1.2	0.0		0.8	0.02	0.0	2.2		0.0	0.0
10 26 77	0.1	0.01	0.0	0.00	1.2	0.0	0.00	0.1	1.3	0.01	1.1	0.0	0.0	0.7	0.03	0.0	2.6	0.0	0.0	0.0
11 21 77	0.0	0.00			0.9	0.0	0.00	0.0	0.4		0.7	0.0		0.5	0.00	0.0	1.6		0.0	0.1
12 22 77	0.1	0.00	0.0	0.00	1.0	0.0	0.00	0.0	0.7	0.03	1.0	0.0	0.0	0.5	0.01	0.0	1.8	0.0	0.1	0.0
2 2 78	0.1	0.00			1.0	0.0	0.00	0.0	0.6		1.0	0.0		0.5	0.01	0.0	1.7		0.1	0.0
3 9 78	0.2	0.00			1.3	0.0	0.00	0.2	0.6		1.1	0.0		0.6	0.01	0.0	1.8		0.0	0.0
4 10 78	0.0	0.00	0.0	0.00	1.4	0.0	0.00	0.0	0.7	0.03	1.0	0.0	0.0	0.7	0.00	0.0	2.4	0.0	0.0	0.0
5 11 78	0.0	0.00			1.2	0.0	0.01	0.0	0.6		1.1	0.0		0.8	0.01	0.0	1.9		0.1	0.0
6 13 78	0.0	0.00	0.0	0.00	1.0	0.0	0.00	0.1	0.5	0.00	1.0	0.0	0.0	0.6	0.01	0.0	2.0	0.0	0.1	0.0
7 11 78	0.0	0.01	0.0	0.00	1.5	0.0	0.00	0.0	0.8	0.02	1.3	0.0	0.0	0.7	0.01	0.0	2.2	0.0	0.1	0.0
8 11 78	0.0	0.00			1.7	0.0	0.00	0.0	0.8		1.1	0.0		0.7	0.01	0.0	2.6		0.0	0.0
10 3 78	0.0	0.01	0.0	0.00	1.8	0.0	0.01	0.1	0.8	0.05	1.0	0.0	0.0	0.5	0.03	0.2	2.4	0.0	0.2	0.0
11 7 78	0.0	0.00			2.3	0.0	0.00	0.0	0.9		1.2	0.0		0.7	0.01	0.0	2.2		0.0	0.0
12 12 78	0.0	0.00			1.4	0.0	0.00	0.0	0.5		0.7	0.0		0.5	0.00	0.0	2.0		0.0	0.0
1 24 79	0.1	0.00			1.3	0.0	0.01	0.1	0.6		0.8	0.0		0.6	0.00	0.0	1.8		0.0	0.3
3 16 79	0.0	0.00			1.2	0.0	0.01	0.0	0.7		0.7	0.0		0.8	0.00	0.0	1.6		0.0	0.0
4 12 79	0.0	0.00	0.1	0.00	1.0	0.0	0.00	0.0	0.5	0.00	0.9	0.0	0.0	0.4	0.00	0.0	1.8	0.0	0.0	0.1
5 15 79	0.0	0.00			1.2	0.0	0.01	0.0	0.6		0.9	0.0		0.6	0.01	0.0	1.8		0.0	0.1
6 5 79	0.1	0.01			1.2	0.0	0.00	0.1	0.6		0.7	0.0		0.5	0.00	0.0	2.1		0.0	0.1
7 6 79	0.0	0.01	0.0	0.00	1.5	0.0	0.00	0.0	0.6	0.01	0.8	0.0	0.0	0.4	0.01	0.0	2.5	0.0	0.0	0.1
7 29 79	0.0	0.00			1.2	0.0	0.01	0.0	0.7		0.9	0.0		0.6	0.01	0.0	2.2		0.0	0.0

TABLE 41. WATER QUALITY FOR SITE 3102 HARLAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT SOLID	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SD4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UH/CM	MG/L									MILLIGRAMS PER LITER					
6 30 77	18	0.08			800	392	195	3.86	8.0		110	132	1	1.6	50					
7 27 77	24	0.04			75	405	230	3.63	8.3		137	163	2	1.7	58	0.5				
8 24 77	20	0.15			1600	355	199	2.11	7.3		51	62	0	1.4	85	1.4				
9 28 77	16	0.03			220	455	244	4.21	7.9		149	180	1	1.8	55	0.2				
10 26 77	14	0.5	671		1600	240	148	2.52	6.8		57	69	0	1.2	51	0.5				
11 21 77	10	1.0	7090			203	127	1.29	7.6		25	31	0	1.8	68	0.6				
12 22 77	2	0.6			150	316	166	1.82	7.5		58	71	0	1.6	68	0.7				
8 11 78	19	0.4	10		3	351	202	3.73	8.2		110	131	1	0.5	53	0.3				
10 3 78	15	0.007	27*		4	392	207	4.56	8.6		146	170	4	1.3	40	0.1				
11 7 78	10	0.003	11		7	405	237	4.31	8.5		155	182	4	1.4	51	0.0				
12 12 78	4	0.1	2		7	264	146	2.02	8.1		60	72	1	0.3	58	0.2				
1 24 79	2	0.7			5500	194	114	1.22	7.4	-4	19	23	0	1.6	62	0.6				
3 16 79	8	0.15	94		190	267	159	1.78	7.9		50	60	0	1.3	69	0.4				
4 12 79	14	0.09	221	0.00	380	250	143	1.90	7.9		49	59	0	1.1	60	0.4				
5 15 79	15	0.008	10	0.00	6	295	181	2.17	8.0	-60	72	87	1	0.7	67	1.4				
6 5 79	14	0.04	19	0.01	75	235	136	1.83	7.9	-51	40	49	0	1.3	60	0.3				
7 6 79	17	0.004	24*		10	361	215	2.24	8.9	-100	111	124	6	0.6	75	0.2	0.0	0.07	0.65	0.15
7 29 79	20	0.6		1.1		276	138	2.72	8.1	-58	65	78	1	0.4	45	0.1	0.0	0.06	1.25	0.60

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 30 77	0.4	0.01			30	0.0	0.00	0.4	3.0		20	0.6		17	0.00	0.0	3.1		0.1	0.0
7 27 77	0.2	0.01			40	0.0	0.01	0.2	3.9		20	0.7		16	0.01	0.1	2.6		0.0	0.0
8 24 77	0.3	0.00			35	0.0	0.00	0.3	4.2		18	0.3		12	0.02	0.1	2.4		0.0	0.0
9 28 77	0.1	0.00			46	0.0	0.00	0.0	3.9		18	0.6		22	0.02	0.0	2.5		0.0	0.0
10 26 77	0.3		0.0	0.00	23	0.0	0.00	0.2	3.8	0.06	12	0.4	0.0	13	0.03	0.0	3.5	0.1	0.1	0.0
11 21 77	0.1	0.00			17	0.0	0.00	0.0	2.3		7.6	0.0		9.0	0.00	0.0	1.5		0.0	0.0
12 22 77	0.5	0.00	0.1	0.00	22	0.0	0.00	0.5	2.4	0.15	11	0.4	0.0	14	0.01	0.0	3.2	0.2	0.1	0.0
8 11 78	0.1	0.00			44	0.0	0.01	0.0	3.7		15	0.1		13	0.02	0.1	2.1		0.0	0.0
10 3 78	0.2	0.01	0.0	0.00	46	0.0	0.01	0.1	3.2	0.08	12	0.0	0.0	11	0.04	0.2	1.5	0.0	0.2	0.0
11 7 78	0.1	0.01			53	0.0	0.00	0.0	3.4		14	0.0		17	0.01	0.1	1.4		0.1	0.0
12 12 78	0.1	0.00			21	0.0	0.01	0.1	2.4		9.2	0.1		13	0.01	0.0	2.5		0.0	0.0
1 24 79	0.7	0.00			14	0.0	0.01	0.4	1.9		7.8	0.0		5.7	0.01	0.0	2.7		0.0	0.0
3 16 79	0.2	0.00			21	0.0	0.03	0.3	2.7		9.5	0.1		17	0.03	0.0	2.8		0.0	0.1
4 12 79	0.4	0.01			21	0.0	0.01	0.4	2.4		10	0.1		10	0.01	0.0	2.6		0.1	0.1
5 15 79	0.1	0.01			32	0.0	0.01	0.1	2.6		12	0.1		12	0.01	0.1	2.2		0.1	0.1
6 5 79	0.2	0.01			21	0.0	0.00	0.2	2.7		9.4	0.1		10	0.01	0.0	2.6		0.0	0.0
7 6 79	0.1	0.00	0.0	0.00	38	0.1	0.14	0.0	3.0	0.15	12	0.0	0.0	13	0.04	0.1	1.8	0.1	0.0	0.0
7 29 79	0.1	0.01	0.0	0.00	24	0.0	0.00	0.0	2.8	0.10	10	0.1	0.0	9.8	0.01	0.1	2.7	0.1	0.0	0.0

TABLE 42. WATER QUALITY FOR SITE 3103 HARLAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
6 30 77	18	0.04			150	188	83	1.57	7.2			23	28	0	2.8	32	1.4				
7 27 77	24	0.01			60	62	46	2.13	7.5			20	24	0	0.8	12	0.1				
8 24 77	22	0.04			85	59	37	1.69	7.2			7	8	0	0.6	14	0.1				
9 28 77	18	0.009			45	84	48	5.29	7.3			29	35	0	0.8	6	0.1				
10 26 77	14	0.25			30	42	37	1.23	6.6			7	8	0	0.9	14	0.1				
11 21 77	11	0.2	11		140	45	31	1.50	6.7			5	6	0	1.0	12	0.2				
12 22 77	4	0.04			2	33	29	1.36	7.3			5	6	0	0.7	12	0.1				
2 2 78	2	0.025			10	38	28	1.82	6.7			6	7	0	0.6	9	0.2				
3 9 78	6	0.3			35	43	29	1.59	6.2			5	6	0	1.5	9	0.3				
4 10 78	14	0.06			4	48	31	1.86	7.3			8	10	0	2.0	8	0.1				
5 11 78	25	0.25	52*		20	42	35	1.16	6.7			7	8	0	1.0	14	0.3				
6 13 78	16	0.03				43	31	2.06	6.9			9	11	0	0.6	9	0.2				
7 11 78	23	0.004	28*		4	60	47	3.60	7.5			24	29	0	1.0	8	0.1				
8 11 78	20	0.006	29*		7	58	39	3.07	7.2			16	19	0	0.4	8	0.1				
10 3 78	16	0.0007	18*		7	56	32	7.18	7.2			20	25	0	0.6	4	0.0				
12 12 78	2	0.01	3		3	32	24	1.26	6.8			4	5	0	1.0	8	0.1				
1 24 79	3	0.08			7	35	30	1.40	6.6	2	3	4	0	0.5	12	0.2					
3 16 79	9	0.006	12		10	36	30	1.29	6.4	-6	3	4	0	0.9	13	0.1					
4 12 79	14	0.04	30	0.00	1	35	29	1.36	6.5		4	5	0	0.6	12	0.1					
5 15 79	14	0.006	11		9	41	35	1.17	6.7		5	6	0	0.4	12	1.4					
6 4 79	15	0.02	17		8	39	33	1.26	6.3	0	7	9	0	0.8	12	0.1					
7 5 79	18	0.0002	37*		40	56	44	2.13	7.5		16	20	0	0.4	12	0.0	0.1	0.14	0.75	0.10	0.01
7 29 79	23	0.002	10		50	47	33	1.93	7.1	0	9	11	0	0.6	10	0.1	0.0	0.01	0.60	0.10	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 30 77	0.0	0.00			10	0.0	0.00	0.0	1.4		5.0	0.0		6.0	0.00	0.0	3.0		0.0	0.0
7 27 77	0.0	0.00			4.0	0.0	0.00	2.3	1.6		2.8	1.5		2.2	0.00	0.0	2.9		0.0	0.1
8 24 77	0.1				3.0	0.0	0.00	0.6	1.6		2.7	0.3		2.1	0.02	0.0	3.7		0.0	0.0
9 28 77	0.0	0.00			5.0	0.0	0.00	2.3	1.7		3.1	2.4		2.5	0.03	0.0	3.2		0.0	0.0
10 26 77	0.1	0.02	0.0	0.00	2.0	0.0	0.00	0.2	2.0	0.01	1.9	0.0	0.0	2.2	0.02	0.0	3.8	0.0	0.0	0.0
11 21 77	0.1	0.00			2.3	0.0	0.00	0.2	1.1		2.0	0.1		2.1	0.00	0.0	3.0		0.0	0.0
12 22 77	0.0	0.00	0.0	0.00	1.9	0.0	0.00	0.3	1.0	0.03	2.0	0.1	0.0	1.6	0.02	0.0	3.0	0.0	0.1	0.0
2 2 78	0.1	0.00			2.0	0.1	0.01	0.2	1.2		2.2	0.0		1.7	0.02	0.1	2.7		0.2	0.0
3 9 78	0.1	0.00			2.2	0.0	0.00	0.1	1.0		2.0	0.0		1.7	0.01	0.0	3.2		0.1	0.0
4 10 78	0.1	0.00	0.0	0.00	2.2	0.0	0.00	0.2	1.1	0.00	2.0	0.2	0.0	1.8	0.00	0.0	3.6	0.0	0.0	0.0
5 11 78	0.1	0.01			2.2	0.0	0.00	0.2	0.9		2.1	0.0		1.7	0.00	0.0	3.4		0.1	0.0
6 13 78	0.1	0.00	0.0	0.00	2.3	0.0	0.00	0.4	0.9	0.00	2.4	0.2	0.0	1.8	0.03	0.1	3.4	0.0	0.3	0.0
7 11 78	0.0	0.02	0.0	0.00	4.5	0.0	0.01	2.6	1.7	0.03	3.5	1.5	0.0	2.2	0.03	0.0	3.3	0.0	0.2	0.0
8 11 78	0.0	0.00			4.1	0.0	0.01	0.8	1.6		2.8	1.0		2.0	0.01	0.0	3.8		0.0	0.0
10 3 78	0.0	0.01	0.0	0.00	4.5	0.0	0.00	0.1	1.3	0.00	2.7	0.2	0.0	1.5	0.01	0.0	2.6	0.0	0.0	0.0
12 12 78	0.1	0.00			1.7	0.0	0.00	0.1	0.7		1.3	0.0		1.0	0.00	0.0	3.1		0.0	0.0
1 24 79	0.4	0.00			2.7	0.0	0.01	0.5	0.9		1.8	0.0		1.4	0.00	0.0	3.2		0.1	0.2
3 16 79	0.1	0.01			2.2	0.0	0.03	0.2	1.3		1.8	0.0		1.8	0.02	0.1	3.0		0.0	0.0
4 12 79	0.1	0.00	0.1	0.00	2.2	0.0	0.00	0.2	0.9	0.05	2.0	0.0	0.0	1.5	0.01	0.0	2.8	0.0	0.0	0.1
5 15 79	0.0	0.00			2.6	0.0	0.00	0.2	1.0		2.1	0.1		1.5	0.01	0.0	3.1		0.0	0.1
6 4 79	0.1	0.00			2.2	0.0	0.03	0.3	1.0		1.8	0.0		1.4	0.00	0.0	3.7		0.0	0.0
7 5 79	0.0	0.00			3.9	0.0	0.00	2.5	1.4		2.8	1.3		1.9	0.00	0.0	3.6		0.0	0.0
7 29 79	0.0	0.00			2.8	0.0	0.00	0.6	1.1		2.3	0.3		1.5	0.02	0.0	3.7		0.1	0.0

TABLE 43. WATER QUALITY FOR SITE 3106 HARLAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	MEUT SOLID	LAB RATIO	ACID- PH	ALKA- LINTY	HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L													
2 2 78	1	0.5			45	1930	1490	1.06	4.9		0	0	0	1.3	990	0.3				
3 9 78	9	2.0	2980		5700	170	112	1.28	7.1		5	6	0	1.6	58	1.1				
4 10 78	21	0.3			100	600	316	1.46	7.8		40	49	0	2.8	180	0.2				
5 11 78	27	0.15	82*		70	339	196	1.51	7.9		52	63	0	1.8	95	0.5				
6 13 78	21	0.2				493	318	1.40	7.6		52	63	0	1.6	170	0.5				
7 11 78	20	0.15	22*		8	1540	1160	1.04	5.3		0	0	0	1.5	770	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
2 2 78	0.3	0.06			120	0.2	0.01	28	14		56	3.1		250	0.14	0.2	7.6		0.4	0.2
3 9 78	1.2	0.00			12	0.0	0.01	1.2	2.8		7.8	0.2		8.4	0.02	0.0	5.2		0.1	0.0
4 10 78	0.2	0.00	0.0	0.00	53	0.0	0.00	0.6	3.2	0.15	20	0.9	0.0	24	0.01	0.0	3.5	0.2	0.0	0.0
5 11 78	0.2	0.02			22	0.1	0.01	0.2	3.0		12	0.3		20	0.03	0.1	3.3		0.2	0.0
6 13 78	0.1	0.02	0.0	0.00	28	0.0	0.00	0.4	3.1	0.00	20	0.6	0.0	47	0.05	0.1	3.8	0.3	0.3	0.0
7 11 78	0.2	0.08	0.0	0.00	87	0.1	0.00	37	8.3	0.35	40	2.5	0.1	200	0.09	0.1	6.7	0.8	0.3	0.1

TABLE 44. WATER QUALITY FOR SITE 3111 JACKSON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DES C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
5 31 77	20	0.015			40	39	31	1.55	7.1		4	5	0	1.2	12						
7 5 77	23	0.009			55	42	24	2.83	6.0		8	10	0	0.5	4	0.5					
8 29 77	23	0.01			8	38	26	4.30	6.0		8	10	0	0.5	4	0.0					
10 3 77	15	0.15	9		20	71	40	1.86	6.5		11	14	0	0.9	14	0.1					
10 31 77	13	0.04	29		20	49	29	1.26	5.0		0	0	0	0.8	13	0.0					
11 30 77	9	0.6	54*		30	29	25	1.25	6.1		5	6	0	1.5	8	0.1					
12 27 77	2	0.08	0		10	39	31	0.98	6.8		5	6	0	2.3	10	0.7					
1 31 78	1	0.09			20	34	29	1.75	6.7		5	6	0	0.6	9	0.3					
3 13 78	7	0.3			35	34	30	1.20	6.5		2	3	0	1.0	12	0.3					
4 10 78	13	0.03			15	35	27	1.50	7.1		3	4	0	1.7	8	0.1					
5 12 78	20	0.02	41*		40	34	29	1.42	6.6		6	7	0	1.0	10	0.2					
6 12 78	20	0.01			8	48	29	1.70	6.1		5	6	0	0.5	10	0.1					
8 10 78	22	0.002	23*		15	42	33	2.20	6.9		8	10	0	0.3	8	0.3					
10 30 78	8	0.0002	15		3	87	56	4.07	7.7	-20	33	40	0	0.9	9	0.0					
12 4 78	10	0.4	12		20	23	20	1.14	5.8		2	2	0	0.5	8	0.1					
1 11 79	2	0.01			7	23	23	1.34	6.4	4	2	3	0	1.0	8	0.1					
3 20 79	11	0.07	4		10	26	26	1.49	6.3	0	5	6	0	0.4	8	0.0					
4 13 79	12	0.03	17	0.00	30	26	26	1.18	6.4	2	3	4	0	0.4	10	0.0					
5 17 79	18	0.006	23		20	28	29	1.24	6.5	2	3	4	0	0.5	12	0.1					
6 1 79	17	0.0001	35		55	31	30	1.52	6.6	4	7	8	0	0.7	9	0.1					
7 9 79	20	0.006	51*		110	33	28	1.16	6.8	-7	6	7	0	0.7	9	0.3	0.2	0.04	3.35	0.30	0.01
7 28 79	20	0.25	18		25	31	21	1.82	6.7	1	5	6	0	0.4	7	0.0	0.0	0.03	0.45	0.10	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 31 77	0.1	0.00			1.8	0.0	0.00	0.1	1.5		1.6	0.0		2.1	0.10	0.0	3.6		0.0	0.0
7 5 77	0.0	0.00			1.3	0.0	0.00	0.0	0.6		1.5	0.0		2.0	0.00	0.0	3.5		0.0	0.0
8 29 77	0.0	0.02			1.9	0.0	0.00	0.2	1.0		1.8	0.0		2.4	0.01	0.0	4.2		0.0	0.3
10 3 77	0.0	0.00	0.0	0.00	3.9	0.0	0.00	0.1	1.4	0.02	2.7	0.0	0.0	2.6	0.00	0.0	3.3	0.0	0.0	0.0
10 31 77	0.0	0.00	0.0	0.00	1.8	0.0	0.00	0.1	0.7	0.03	1.9	0.0	0.0	2.1	0.01	0.0	4.2	0.0	0.0	0.0
11 30 77	0.0	0.01			1.4	0.0	0.00	0.0	0.8		1.4	0.0		1.1	0.00	0.0	3.7		0.0	0.0
12 27 77	0.1	0.00	0.0	0.00	1.4	0.0	0.00	0.1	0.9	0.03	1.7	0.0	0.0	2.0	0.00	0.0	3.1	0.0	0.0	0.0
1 31 78	0.1	0.00			1.9	0.0	0.00	0.1	0.9		2.0	0.1		2.0	0.00	0.0	3.6		0.0	0.0
3 13 78	0.0	0.00			1.6	0.0	0.00	0.1	1.1		1.7	0.0		2.0	0.01	0.0	3.7		0.1	0.0
4 10 78	0.0	0.00	0.0	0.00	1.6	0.0	0.00	0.1	0.9	0.00	1.6	0.0	0.0	1.8	0.00	0.0	4.0	0.0	0.0	0.0
5 12 78	0.0	0.01			1.7	0.0	0.00	0.1	0.8		1.7	0.0		1.8	0.01	0.0	3.7		0.1	0.0
6 12 78	0.0	0.00	0.0	0.00	1.9	0.0	0.00	0.1	0.8	0.04	1.9	0.0	0.0	2.3	0.01	0.0	3.8	0.0	0.0	0.0
8 10 78	0.0	0.00			2.3	0.0	0.01	0.1	1.2		2.0	0.1		2.2	0.02	0.0	4.5		0.0	0.0
10 30 78	0.0	0.00			5.4	0.0	0.00	0.1	1.3		3.6	0.0		5.0	0.00	0.0	4.8		0.0	0.0
12 4 78	0.1	0.00			1.2	0.0	0.00	0.1	0.9		0.9	0.0		1.0	0.01	0.0	3.0		0.0	0.0
1 11 79	0.1	0.00			1.9	0.0	0.00	0.2	0.6		1.1	0.0		1.4	0.00	0.0	3.3		0.0	0.1
3 20 79	0.0	0.00			1.6	0.0	0.01	0.0	0.9		1.2	0.0		1.7	0.02	0.0	3.8		0.1	0.0
4 13 79	0.1	0.00	0.1	0.00	1.6	0.0	0.01	0.1	0.7	0.00	1.3	0.0	0.0	1.4	0.00	0.0	3.6	0.0	0.0	0.1
5 17 79	0.0	0.01			1.6	0.0	0.00	0.1	1.0		1.5	0.0		2.3	0.01	0.0	3.7		0.1	0.0
6 1 79	0.1	0.00			2.1	0.0	0.00	0.1	0.8		1.5	0.0		1.7	0.02	0.0	4.1		0.1	0.4
7 9 79	0.1	0.00	0.0	0.00	1.7	0.0	0.00	0.2	0.8	0.05	1.2	0.0	0.0	1.3	0.00	0.0	3.7	0.0	0.0	0.0
7 28 79	0.1	0.01			1.5	0.0	0.00	0.1	0.7		1.4	0.0		1.3	0.01	0.0	2.5		0.0	0.0

TABLE 45. WATER QUALITY FOR SITE 3112 JACKSON COUNTY, KENTUCKY

TABLE 1. WATER QUALITY																NO3						TOT		TOT ORTH			
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SD4	AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4						
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER																	
5	31	77	21	0.06			80	291	170	1.15	6.8		29	35	0	1.6	100										
7	5	77	22	0.08			0	462	313	0.97	6.8		18	22	0	1.2	220	0.5									
7	29	77	20	0.25			20	243	163	0.95	6.5		20	25	0	0.9	100	1.3									
8	29	77	22	0.02			85	479	316	1.31	6.4		34	42	0	1.3	190	1.4									
10	3	77	14	0.1	44		20	802	560	1.27	6.5		34	42	0	1.3	360	0.7									
10	31	77	13	0.025	18		0	527	313	1.48	7.3		43	53	0	1.7	180	0.6									
11	30	77	5	0.15	68*		40	403	258	1.13	6.8		22	27	0	0.6	150	3.8									
12	27	77	2	0.02	10		8	511	291	1.23	7.0		33	40	0	1.0	180	0.7									
3	6	78	1	0.06			10	474	298	1.14	7.8		45	55	0	2.3	180	2.0									
4	17	78	16	0.02	33		20	604	401	1.37	7.6		48	58	0	1.8	240	0.5									
5	13	78	17	0.07	15		5	461	301	1.09	7.4		23	28	0	4.0	190	1.4									
6	19	78	16	0.01				612	390	1.18	7.5		43	53	0	1.1	250	0.3									
7	5	78	20	0.005	53*		40	536	360	1.21	7.7		34	41	0	1.4	230	0.5									
8	10	78	22	0.02	24*		20	540	358	1.33	7.6		33	40	0	1.0	220	0.3									
9	22	78	19	0.001	54*		25	515	356	1.00	7.3		18	22	0	1.5	250	0.1									
10	30	78	8	0.008	12		0	513	355	1.04	7.5	-14	22	27	0	1.4	240	0.0									
12	4	78	10	0.01	48		90	356	200	1.05	7.0		9	11	0	0.9	130	0.8									
1	15	79	2	0.03	35		90	636	483	1.20	7.2		15	18	0	1.3	320	0.5									
3	20	79	12	0.08	33		25	691	540	1.03	7.3	-18	23	28	0	4.3	370	0.4									
4	13	79	18	0.2	113	0.02	440	435	294	1.10	6.9		8	10	0	7.3	190	0.7									
5	17	79	20	0.002	14		0	645	473	1.14	7.5	-17	28	34	0	3.1	310	1.2									
6	1	79	19	0.008	28		15	639	417	1.16	7.6	-10	30	37	0	2.5	280	0.2									
7	9	79	20	0.0009	18*		40	825	572	1.18	8.0	-28	51	61	0	2.6	370	0.1	0.1	0.05	0.90	0.10	0.01				
7	28	79	22	0.007	35		65	625	405	1.03	7.6		25	31	0	2.6	280	0.3	0.1	0.09	0.75	0.00	0.01				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 31 77	0.1	0.03			26	0.0	0.00	0.1	3.7		11	1.6		2.6	0.15	0.0	2.8		0.0	0.1
7 5 77	0.1	0.03			36	0.1	0.02	0.1	5.9		28	3.9		4.0	0.16	0.1	2.7		0.0	0.1
7 29 77	0.1	0.02			20	0.0	0.00	0.1	4.0		11	2.4		2.7	0.02	0.0			0.0	0.0
8 29 77	0.1	0.05			44	0.0	0.00	0.3	5.8		33	5.2		4.4	0.05	0.0	3.4		0.0	0.6
10 3 77	0.2	0.05	0.0	0.00	86	0.1	0.01	1.4	8.8	0.30	57	11	0.0	6.0	0.22	0.1	3.3	0.3	0.1	0.1
10 31 77	0.1	0.04	0.0	0.00	47	0.0	0.00	0.1	4.9	0.15	36	4.6	0.0	4.1	0.05	0.0	3.7	0.2	0.0	0.1
11 30 77	0.1	0.04			28	0.0	0.00	0.2	3.3		28	6.3		2.5	0.05	0.0	2.7		0.0	0.1
12 27 77	0.1	0.00	0.1	0.00	33	0.0	0.00	0.2	5.5	0.25	33	6.2	0.0	4.3	0.08	0.0	2.4	0.3	0.1	0.0
3 6 78	0.2	0.00			29	0.0	0.01	0.3	4.5		33	5.3		3.6	0.08	0.1	2.1		0.0	0.0
4 17 78	0.1	0.03	0.0	0.00	52	0.0	0.00	0.1	5.5	0.30	49	7.1	0.0	4.6	0.05	0.0	3.3	0.2	0.1	0.0
5 13 78	0.4	0.04			32	0.0	0.01	0.7	5.3		33	4.3		3.2	0.07	0.0	2.8		0.1	0.0
6 19 78	0.1	0.05	0.0	0.00	50	0.0	0.00	0.1	5.3	0.00	42	1.0	0.0	4.6	0.05	0.0	3.0	0.3	0.2	0.0
7 5 78	0.1	0.05			48	0.0	0.00	0.1	6.0		39	1.3		4.2	0.03	0.0	2.8		0.0	0.0
8 10 78	0.2	0.03			53	0.0	0.01	0.1	7.3		38	1.8		5.8	0.06	0.1	3.7		0.1	0.0
9 22 78	0.1	0.04			40	0.0	0.01	0.3	5.7		34	0.9		4.8	0.05	0.1	3.2		0.2	0.0
10 30 78	0.1	0.03			45	0.0	0.00	0.0	4.5		34	1.2		4.4	0.05	0.1	3.0		0.1	0.0
12 4 78	0.1	0.01			23	0.0	0.01	0.2	3.6		20	3.5		1.9	0.06	0.0	1.8		0.1	0.0
1 15 79	0.2	0.05	0.1	0.00	76	0.0	0.01	0.7	5.2	0.55	49	5.7	0.0	3.6	0.13	0.1	3.1	0.5	0.0	0.6
3 20 79	0.2	0.05			77	0.0	0.00	0.1	4.9		50	4.2		3.6	0.12	0.1	2.7		0.2	0.1
4 13 79	0.1	0.03	0.2	0.00	42	0.0	0.01	0.0	5.8	0.15	29	2.4	0.0	1.9	0.06	0.0	1.9	0.2	0.0	0.2
5 17 79	0.1	0.06			70	0.0	0.00	0.1	4.7		47	2.7		3.6	0.06	0.1	2.0		0.2	0.0
6 1 79	0.2	0.05			60	0.0	0.01	0.1	5.2		43	3.0		3.4	0.07	0.1	2.0		0.1	0.3
7 9 79	0.4	0.06	0.0	0.00	82	0.0	0.01	0.4	6.2	0.35	58	3.5	0.0	5.0	0.09	0.1	3.0	0.3	0.2	0.0
7 28 79	0.2	0.06			50	0.0	0.02	0.1	5.7		39	5.3		3.0	0.06	0.1	3.1		0.1	0.1

TABLE 46. WATER QUALITY FOR SITE 3114 JACKSON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L											
----- MILLIGRAMS PER LITER -----																		
5 31 77	18	0.05			65	49	36	1.84	6.9		11	14	0	0.8	12			
7 5 77	24	0.02			50	42	27	2.55	6.4		7	9	0	0.3	6	0.3		
7 29 77	20	0.06			50	51	26	2.07	6.8		13	16	0	1.1	9	0.0		
8 29 77	23	0.025			25	46	31	2.62	6.7		7	8	0	0.5	8	0.0		
10 3 77	15	0.2	37		55	48	34	2.07	6.7		7	9	0	0.5	10	0.1		
10 31 77	13	0.08	5		6	51	34	1.75	6.6		7	8	0	0.9	12	0.0		
11 30 77	9	0.3	21		15	41	32	1.65	6.8		5	6	0	1.2	11	0.1		
12 27 77	2	0.03	1		8	51	37	1.31	7.3		7	8	0	3.2	12	0.3		
1 31 78	2	0.15			25	35	28	1.99	6.7		6	7	0	0.6	8	0.1		
3 13 78	7	0.25			40	34	29	1.74	6.5		5	6	0	0.8	9	0.1		
4 10 78	14	0.025			35	41	30	1.73	7.2		2	3	0	1.9	9	0.1		
5 12 78	21	0.02	70*		70	44	45	0.99	6.9		6	7	0	1.5	20	0.2		
6 12 78	20	0.01				63	36	2.07	6.9		11	13	0	4.7	7	0.3		
7 5 78	24	0.002			114	61		5.66	7.6		32	39	0	3.0	8	0.1		
8 10 78	23	0.008	22*		15	97	68	4.35	7.4		27	33	0	2.1	12	0.7		
12 4 78	11	0.06	32		45	33	26	1.30	6.3		3	4	0	0.8	9	0.2		
1 11 79	2	0.005			10	30	28	1.32	6.6	3	3	4	0	1.2	10	0.1		
3 20 79	12	0.04	25		25	31	25	1.32	6.3	-1	2	3	0	0.4	10	0.0		
4 13 79	16	0.05	338	0.60	1100	43	33	1.18	6.6	4	5	6	0	0.7	13	0.1		
5 17 79	18	0.001	52	0.24	90	50	34	1.55	6.8	-2	7	9	0	1.0	11	0.3		
6 1 79	19	0.0002	20		65	50	37	1.69	6.8	0	10	12	0	0.6	12	0.0		
7 9 79	19	0.015	87*	0.40	450	44	42	1.73	7.0		8	10	0	0.4	14	0.2	0.2	0.11
7 28 79	22	0.2	51	0.01	90	44	38	1.48	7.0	4	7	8	0	0.4	15	0.0	0.0	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l)

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI
MO DA YR	----- MILLIGRAMS PER LITER -----																
5 31 77	0.1	0.00			2.1	0.0	0.00	0.1	2.0		1.9	0.0		1.9	0.15	0.0	3.8
7 5 77	0.0	0.00			1.4	0.0	0.00	0.1	1.0		1.9	0.0		2.2	0.00	0.0	3.8
7 29 77	0.1	0.00			2.5	0.0	0.00	0.1	1.4		2.2	0.1		1.8	0.00	0.0	
8 29 77	0.0	0.00			2.3	0.0	0.00	0.1	1.6		2.3	0.0		2.5	0.01	0.0	4.3
10 3 77	0.1		0.0	0.00	2.6	0.0	0.00	0.1	1.5	0.02	2.2	0.0	0.0	2.4	0.00	0.0	4.6
10 31 77	0.0	0.00	0.0	0.00	2.4	0.0	0.00	0.1	1.1	0.03	2.4	0.0	0.0	2.4	0.00	0.0	4.5
11 30 77	0.1	0.00			2.2	0.0	0.00	0.1	1.2		2.2	0.1		2.3	0.00	0.0	3.9
12 27 77	0.1	0.00	0.0	0.00	2.0	0.0	0.00	0.1	1.2	0.03	2.3	0.0	0.0	2.3	0.00	0.0	4.3
1 31 78	0.1	0.00			1.7	0.0	0.00	0.1	0.9		2.0	0.0		2.0	0.00	0.0	3.8
3 13 78	0.0	0.00			1.6	0.0	0.00	0.0	1.3		2.0	0.0		2.2	0.01	0.0	3.9
4 10 78	0.1	0.00	0.0	0.00	2.0	0.0	0.00	0.1	1.4	0.00	2.0	0.1	0.0	2.2	0.00	0.0	4.1
5 12 78	0.5	0.01			2.8	0.0	0.00	0.2	1.2		2.7	0.2		2.0	0.02	0.0	4.2
6 12 78	0.0	0.00	0.0	0.00	2.2	0.0	0.00	0.1	1.2	0.05	2.4	0.0	0.0	2.4	0.01	0.0	4.0
7 5 78	0.0	0.02			6.3	0.0	0.00	0.8	4.0		5.1	1.7		5.0	0.01	0.0	3.4
8 10 78	0.1	0.00			5.7	0.0	0.02	0.5	4.0		4.3	1.1		10	0.03	0.0	4.1
12 4 78	0.1	0.00			1.9	0.0	0.00	0.1	1.5		1.3	0.0		1.2	0.00	0.0	3.1
1 11 79	0.1	0.00			2.2	0.0	0.00	0.1	0.8		1.4	0.0		1.5	0.01	0.0	3.5
3 20 79	0.0	0.00			1.6	0.0	0.00	0.0	0.9		1.4	0.0		1.7	0.00	0.0	3.7
4 13 79	0.5	0.00	0.0	0.00	1.9	0.0	0.01	0.4	1.2	0.00	1.7	0.0	0.0	1.7	0.00	0.0	4.3
5 17 79	0.0	0.01			2.1	0.0	0.00	0.1	1.3		1.9	0.1		2.5	0.01	0.0	4.0
6 1 79	0.1	0.00			2.8	0.0	0.00	0.1	1.4		2.0	0.1		2.4	0.01	0.0	4.3
7 9 79	0.3	0.01	0.0	0.00	3.6	0.0	0.01	0.4	1.5	0.05	3.0	0.2	0.0	1.8	0.01	0.0	4.7
7 28 79	0.1	0.00			2.8	0.0	0.00	0.1	1.2		2.8	0.1		1.6	0.02	0.0	4.7

TABLE 47. WATER QUALITY FOR SITE 3121 JOHNSON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO ₃	CO ₃	CL	SD ₄	NO ₃ AS N	NO ₃ AS N	NH ₃ AS N	TOT N	TOT P	ORTH PO ₄
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
8 4 77	18	0.004			4	144	79	2.94	7.7			32	39	0	2.0	22	0.1				
10 4 77	14	0.05	2		0	130	75	3.54	6.6			27	33	0	1.5	19	0.1				
11 11 77	8	0.05	16		20	123	67	3.11	7.3			30	36	0	1.5	18	0.0				
12 20 77	8	0.06			2	98	59	1.94	7.1			16	20	0	1.8	22	0.1				
8 18 78	18	0.001	22*		4	114	71	3.17	7.5			29	35	0	0.8	18	0.1				
10 5 78	16	0.0007	31*		0	130	78		7.7			40	49	0		20	0.1				
11 14 78	15	0.001	10		5	111	75	3.00	7.9			38	46	0	1.6	19	0.2				
12 27 78	5	0.02	8		3	98	89	1.28	7.2	-18		19	23	0	1.1	45	0.1				
5 23 79	16	0.001	118		160	92	54	1.85	7.1	-8		16	20	0	1.4	19	0.2				
6 22 79		0.06	14		30	109	72	2.43	7.7	-23		32	39	0	1.1	21	0.0				
7 26 79	18	0.02	5		25	123	70	2.58	7.5	-30		32	39	0	1.5	19	0.2	0.0	0.02	0.60	0.15
9 5 79	19	0.01	1		8	110	68	2.41	7.6	-22		31	38	0	1.2	20	0.0				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 4 77	0.0	0.00			12	0.0	0.00	0.1	2.5		5.4	0.3		5.9	0.00	0.0	4.5		0.0	0.2
10 4 77	0.0	0.01	0.0	0.00	15	0.0	0.00	0.2	1.6	0.04	6.3	0.1	0.0	3.8	0.01	0.0	5.0	0.0	0.0	0.0
11 11 77	0.0	0.00			13	0.0	0.00	0.0	0.9		4.8	0.0		3.4	0.00	0.0	3.9		0.0	0.0
12 20 77	0.1	0.00			8.5	0.0	0.00	0.1	1.2		4.6	0.0		2.5	0.01	0.0	3.7		0.1	0.0
8 18 78	0.0	0.00			12	0.0	0.01	0.1	1.7		5.4	0.1		3.8	0.02	0.0	5.5		0.0	0.0
10 5 78	0.0	0.00	0.0	0.00	13	0.0	0.00	0.3	1.7	0.06	5.3	0.3	0.0	3.1	0.00	0.0	4.2	0.1	0.0	0.0
11 14 78	0.0	0.01			13	0.0	0.01	0.0	1.5		5.0	0.0		3.0	0.01	0.0	3.9		0.1	0.0
12 27 78	0.4	0.00			12	0.0	0.00	0.1	1.1		5.9	0.4		2.5	0.02	0.0	3.9		0.0	0.1
5 23 79	0.1	0.00			7.9	0.0	0.00	0.1	1.2		3.4	0.1		2.1	0.01	0.0	3.4		0.0	0.0
6 22 79	0.1	0.01			12	0.0	0.02	0.0	1.3		4.7	0.0		2.4	0.01	0.0	4.4		0.0	0.1
7 26 79	0.1	0.01	0.2	0.00	11	0.0	0.00	0.1	1.3	0.05	4.8	0.0	0.0	2.3	0.01	0.0	4.2	0.0	0.1	0.3
9 5 79	0.0	0.01			10	0.1	0.00	0.2	1.4		4.7	0.1		2.4	0.05	0.0	4.2		0.0	0.0

TABLE 48. WATER QUALITY FOR SITE 3122 JOHNSON COUNTY, KENTUCKY

														NO3							TOT		TOT		ORTH	
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	PO4				
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----																
8	3	77	23	0.003			35	2490	1930	0.60	3.2		0	0	0	2.2	1400	0.1								
10	4	77	16	0.0000	16		4	2190	2100	0.94	3.5		0	0	0	1.7	1400	0.0								
11	11	77	8	0.01	88		4	2290	1830	0.71	2.9		0	0	0	2.3	1300	0.0								
12	20	77	7	0.009			6	865	773	0.83	4.3		0	0	0	4.2	540	0.4								
2	1	78	0				75	2040	2000	0.78	3.5		0	0	0	1.4	1500	0.3								
3	2	78	6	0.03			15	854	628	0.96	4.9		0	0	0	4.3	420	0.3								
3	31	78	25	0.15			4	1450	1480	0.91	3.6		0	0	0	1.4	1100	0.3								
4	27	78	21	0.05	67		0	1230	994	0.83	4.0		0	0	0	1.4	730	0.2								
5	22	78	24	0.005	40*		25	1690	1300	0.91	3.3		0	0	0	1.0	900	0.1								
8	18	78	18	0.15	32*		10	718	506	0.89	5.8		0	0	0	1.4	360	1.5								
12	27	78	4	0.02	46		35	1680	1710	0.72	3.8	170	0	0	0	1.1	1300	0.5								
1	30	79	3	0.06	8		4	1420	1160	0.80	3.8	110	0	0	0	1.1	870	0.3								
2	28	79	5	0.09	294		440	1260	1160	0.83	4.1	71	0	0	0	1.0	870	0.4								
4	4	79	13	0.1	129		130	1090	810	0.91	4.3		0	0	0	0.8	590	0.2								
5	23	79	17	0.07	1670	16	4700	1230	955	0.81	3.7	94	0	0	0	1.0	710	1.1								
6	22	79		0.1	331	1.0	290	895	697	0.87	3.7	44	0	0	0	1.3	500	0.3								
7	27	79	21	0.3	6670	95	12000	374	190	0.75	3.9	18	0	0	0	0.8	140	0.2	0.0	0.08	0.90	0.20	0.00			

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 77	29	0.08			220	1.2	0.11	42	15		74	59		13	1.2	0.2	22		0.2	2.3
10 4 77	26	0.11	0.0	0.02	260	1.6	0.09	47	18	0.80	170	64	0.0	11	1.1	0.2	34	0.8	0.5	1.9
11 11 77	26	0.11			190	1.1	0.09	37	11		120	59		10	0.90	0.1	23		0.2	2.2
12 20 77	4.4	0.03			83	0.2	0.01	5.6	5.8		60	33		9.6	0.22	0.1	9.2		0.2	0.4
2 1 78	35	0.03	0.0	0.01	200	0.7	0.11	6.0	8.7	1.0	170	39	0.0	12	0.86	0.1	16	1.3	0.2	1.3
3 2 78	3.3	0.07			75	0.2	0.01	4.8	5.2		53	29		9.7	0.16	0.1	7.5		0.1	0.2
3 31 78	19	0.11			170	0.4	0.07	2.2	13		140	33		11	0.59	0.1	12		0.4	0.8
4 27 78	11	0.03	0.0	0.01	110	0.2	0.05	1.3	6.8	0.45	81	18	0.0	8.0	0.35	0.1	9.6	0.5	0.1	0.5
5 22 78	17	0.06	0.0	0.01	150	0.5	0.04	22	11	0.40	110	33	0.1	9.4	0.55	0.1	20	0.6	0.3	0.8
8 18 78	0.3	0.03			54	0.1	0.01	0.9	3.9		45	8.7		7.5	0.13	0.2	6.5		0.2	0.1
12 27 78	19	0.07			180	0.4	0.08	1.4	6.2		120	22		10	0.53	0.2	14		0.4	0.9
1 30 79	13	0.05	0.0	0.01	130	0.3	0.04	0.8	5.9	0.95	91	15	0.1	7.7	0.44	0.3	9.6	0.5	0.6	0.6
2 28 79	12	0.04			140	0.2	0.04	0.7	5.6		90	14		7.1	0.40	0.1	9.2		0.3	0.5
4 4 79	6.5	0.03			110	0.1	0.02	0.6	4.8		65	9.2		6.1	0.24	0.1	7.2		0.3	0.4
5 23 79	11	0.03			130	0.2	0.08	0.4	6.2		63	12		6.6	0.41	0.2	4.8		0.2	0.6
6 22 79	6.2	0.05			94	0.1	0.03	0.2	5.2		50	8.6		5.5	0.23	0.1	9.1		0.2	0.4
7 27 79	1.2	0.02	0.1	0.00	20	0.1	0.06	0.1	3.0	0.10	12	3.2	0.0	1.9	0.10	0.0	4.4	0.0	0.0	0.4

TABLE 49. WATER QUALITY FOR SITE 3124 JOHNSON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
2 1 78	1	0.1			15	72	51	1.20	6.9			6	7	0	1.0	25	0.0				
3 2 78	0	0.15			15	81	56	1.35	6.9			8	10	0	1.2	25	0.1				
3 31 78	14	0.1			8	69	49	1.55	6.9			6	7	0	1.1	20	0.0				
4 27 78	14	0.09	8		0	66	46	1.45	6.7			6	7	0	1.4	20	0.1				
5 22 78	19	0.04	28*		2	74	58	1.13	6.9			7	9	0	0.9	27	0.1				
6 22 78	20	0.01				76	53	2.30	7.1	-18		19	23	0	1.2	15	0.2				
1 30 79	2	0.03	3		2	63	42	1.75	6.6	0		5	6	0	1.0	16	0.0				
2 28 79	6	0.05	4		2	60	43	1.32	6.3	0		3	4	0	0.6	20	0.0				
4 4 79	11	0.09	15		7	59	40	1.25	6.6			3	4	0	0.9	19	0.0				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
2 1 78	0.0	0.00	0.0	0.00	4.5	0.0	0.00	0.3	1.0	0.01	3.5	0.1	0.0	2.5	0.00	0.0	4.7	0.0	0.0	0.0
3 2 78	0.0	0.01			4.6	0.0	0.00	0.2	1.3		4.2	0.1		3.2	0.01	0.0	5.2		0.0	0.0
3 31 78	0.0	0.03			4.3	0.0	0.00	0.2	1.5		3.9	0.1		2.8	0.02	0.0	5.2		0.2	0.0
4 27 78	0.1	0.00	0.0	0.00	4.6	0.0	0.00	0.1	1.4	0.07	3.4	0.0	0.0	2.4	0.01	0.0	4.3	0.0	0.0	0.0
5 22 78	0.0	0.01	0.0	0.00	4.5	0.0	0.00	0.2	1.3	0.09	3.4	0.1	0.0	3.0	0.00	0.0	5.7	0.0	0.1	0.0
6 22 78	0.0	0.01	0.0	0.00	5.2	0.0	0.00	0.2	2.1	0.00	3.7	0.0	0.0	3.5	0.01	0.0	4.4	0.1	0.1	0.0
1 30 79	0.0	0.00	0.0	0.00	4.5	0.0	0.01	0.6	1.2	0.04	3.3	0.1	0.0	2.3	0.02	0.0	4.6	0.0	0.0	0.0
2 28 79	0.0	0.00			4.0	0.0	0.00	0.2	1.1		3.1	0.1		2.0	0.01	0.0	4.3		0.1	0.0
4 4 79	0.0	0.00	0.0	0.00	3.4	0.1	0.01	0.1	1.1	0.10	2.7	0.0	0.0	2.0	0.02	0.1	4.1	0.0	0.0	0.0

TABLE 50. WATER QUALITY FOR SITE 3125 JOHNSON COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
8 4 77	22	0.05			20	1100	867	0.99	4.5			0	0	0	1.6	600	5.5				
10 4 77	16	0.15	0		0	753	595	1.10	6.0			6	7	0	1.2	400	0.9				
11 11 77	8	0.04	26		50	714	499	0.99	5.2			0	0	0	1.6	350	0.6				
12 20 77	6	0.07			0	855	624	0.92	4.6			0	0	0	1.6	450	1.2				
2 1 78	1	0.04			25	630	480	0.89	5.0			0	0	0	1.4	340	1.7				
3 2 78	1	0.4			15	663	537	0.86	5.0			0	0	0	1.7	390	1.7				
3 31 78	16	0.4			10	535	391	0.97	4.8			0	0	0	1.5	270	1.5				
4 27 78	19	0.25	24		0	376	254	0.89	4.4			0	0	0	1.2	180	0.6				
5 22 78	20	0.07	20*		2	679	455	1.07	5.6			0	0	0	1.6	310	2.7				
6 22 78	20	0.02				859	616	0.94	6.4			2	3	0	1.6	430	4.5				
7 20 78	24	0.02			15	827	587	0.92	4.6			0	0	0	1.6	430	0.3				
10 5 78	18	0.025	27*		2	791	634	0.86	6.2			3	4	0	1.5	470	1.2				
11 14 78	18	0.02	1		30	744	487	1.05	5.6	6		0	0	0	2.0	340	0.3				
12 27 78	5	0.1	9		15	889	629	1.00	4.2	68		0	0	0	1.1	430	1.8				
1 30 79	2	0.15	3		25	710	471	0.91	4.1	32		0	0	0	0.7	330	1.2				
2 28 79	4	0.2	6		25	480	369	0.88	4.4	24		0	0	0	1.4	260	0.9				
4 4 79	11	0.15	14		20	381	282	1.06	4.4			0	0	0	0.9	190	0.5				
5 23 79	16	0.04	25		4	824	539	1.01	4.8	27		0	0	0	1.0	380	1.1				
6 22 79		0.4	27		90	461	281	0.86	4.2	30		0	0	0	1.0	200	0.3				
7 27 79	20	0.2	118	0.65	280	1080	725	1.03	4.0	48		0	0	0	5.2	490	1.6	0.3	1.20	2.05	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
8 4 77	3.2	0.01			86	0.2	0.02	2.1	6.0		92	19		17	0.28	0.1	7.1		0.1	0.3
10 4 77	0.6	0.02	0.0	0.00	76	0.1	0.01	1.6	4.6	0.20	56	14	0.0	17	0.17	0.1	7.2	0.3	0.1	0.1
11 11 77	0.4	0.02			64	0.1	0.00	2.7	3.5		42	10		10	0.13	0.0	5.8		0.0	0.1
12 20 77	1.7	0.00			66	0.1	0.02	2.3	3.9		60	13		9.7	0.18	0.1	6.3		0.1	0.2
2 1 78	1.0	0.00	0.0	0.00	49	0.1	0.01	2.7	3.4	0.20	44	9.0	0.0	8.9	0.15	0.0	4.8	0.3	0.0	0.2
3 2 78	1.9	0.02			50	0.1	0.02	2.0	3.4		51	7.9		9.2	0.16	0.0	5.0		0.0	0.1
3 31 78	0.5	0.05			34	0.1	0.00	1.2	3.4		43	8.4		7.4	0.13	0.1	5.2		0.2	0.1
4 27 78	2.8	0.00	0.0	0.00	20	0.1	0.01	0.9	2.9	0.08	26	3.9	0.1	5.0	0.10	0.0	4.6	0.1	0.1	0.1
5 22 78	0.3	0.02	0.1	0.00	50	0.1	0.01	0.2	3.7	0.10	49	9.7	0.0	9.5	0.11	0.0	6.0	0.2	0.1	0.1
6 22 78	0.2	0.02	0.0	0.00	63	0.1	0.00	0.2	4.0	0.00	60	13	0.0	12	0.15	0.1	6.2	0.5	0.3	0.0
7 20 78	0.4	0.02			61	0.1	0.00	1.0	4.3		56	10		11	0.06	0.1	6.1		0.2	0.0
10 5 78	0.2	0.00	0.0	0.00	66	0.0	0.01	0.7	4.5	0.15	56	9.0	0.0	11	0.08	0.1	4.8	0.3	0.1	0.1
11 14 78	0.1	0.00			60	0.1	0.03	0.2	4.3		41	4.9		24	0.09	0.1	4.6		0.1	0.1
12 27 78	11	0.01			76	0.2	0.04	1.4	3.1		61	11		7.8	0.26	0.1	6.0		0.2	0.3
1 30 79	3.8	0.01	0.0	0.00	52	0.1	0.01	2.7	2.7	0.40	43	8.5	0.0	5.6	0.18	0.1	4.9	0.2	0.3	0.2
2 28 79	3.6	0.01			41	0.1	0.01	1.4	2.1		32	5.0		4.6	0.13	0.0	4.5		0.1	0.1
4 4 79	2.0	0.00			37	0.0	0.01	0.8	2.1		27	3.4		4.1	0.09	0.0	4.3		0.1	0.1
5 23 79	1.0	0.01			64	0.1	0.01	0.3	3.2		53	11		9.2	0.14	0.1	5.7		0.1	0.1
6 22 79	3.3	0.02			26	0.0	0.01	1.0	2.4		25	4.4		4.5	0.12	0.0	5.5		0.0	0.2
7 27 79	8.2	0.04	0.2	0.01	90	0.3	0.09	0.0	6.5	0.35	70	18	0.0	8.8	0.21	0.1	7.7	0.3	0.2	0.6

TABLE 51. WATER QUALITY FOR SITE 3131 KNOTT COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 29 77	18	0.03			15	59	38	2.17	6.8		13	16	0	0.7	10	0.6					
7 26 77	24	0.025			110	86	47	3.24	7.2		30	37	0	1.6	11	0.1					
8 23 77	21	0.015			0	57	39	2.09	6.8		9	11	0	0.5	12	0.1					
9 27 77	17	0.03			80	69	40	2.51	6.7		13	16	0	0.4	10	0.2					
10 25 77	12	0.04			20	64	48	1.90	6.4		14	17	0	0.8	16	0.0					
11 28 77	7	0.3	15		10	54	39	1.52	6.9		6	7	0	0.9	16	0.1					
12 20 77	8	0.2			4	52	39	1.38	6.6		6	7	0	0.8	16	0.1					
1 24 78	2	0.09			4	44	33	1.65	6.5		6	7	0	0.5	11	0.6					
3 7 78	5	0.7	10		30	53	35	1.71	6.8		6	7	0	0.7	14	0.1					
4 18 78	10	0.2	32		15	56	38	1.75	6.7		6	7	0	1.5	14	0.2					
5 16 78	17	0.08	22*		15	46	34	1.73	6.7		4	5	0	0.8	12	0.1					
6 14 78	19	0.025				55	41	2.09	6.9		14	17	0	0.6	13	0.2					
7 13 78	22	0.0000	43*		15	63	45	3.23	7.3		19	23	0	0.9	10	0.1					
8 15 78	21	0.002	22*		6	63	40	3.04	7.3		17	21	0	0.2	10	0.1					
10 2 78	18	0.0008	17*		10	64	43	2.36	7.3		18	22	0	0.6	12	0.0					
11 7 78	11	0.0002	13		3	66	48	2.54	6.7		16	20	0	0.8	14	0.0					
12 7 78	6	0.01	2		15	43	31	1.66	6.8		7	8	0	0.7	10	0.4					
3 21 79	18	0.1	6		5	45	36	1.47	6.3		2	3	0	0.5	15	0.0					
4 11 79	14	0.01	9	0.00	3	42	34	1.31	6.5		2	3	0	0.7	16	0.0					
5 16 79	19	0.002	7		9	54	37	1.38	6.7	0	7	8	0	1.0	14	0.3					
6 6 79	16	0.003	7		10	52	34	1.17	6.6	-1	7	8	0	0.9	14	0.1					
7 7 79	20	0.002	6		15	52	37	2.45	7.0		9	11	0	0.9	13	0.0	0.00	1.70	0.05	0.00	
7 30 79	19	0.02	11		30	52	37	1.86	7.2	-4	8	10	0	0.5	13	0.0	0.0	0.00	0.65	0.10	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 29 77	0.0	0.00			3.6	0.0	0.00	0.1	1.3		2.6	0.0		1.9	0.01	0.0	3.4		0.0	0.1
7 26 77	0.0	0.00			5.8	0.0	0.00	0.1	2.8		3.8	0.1		2.8	0.00	0.0			0.0	0.0
8 23 77	0.0				3.8	0.0	0.00	0.1	1.7		2.8	0.0		2.2	0.02	0.0	4.4		0.0	0.0
9 27 77	0.0	0.03			3.9	0.0	0.00	0.1	1.7		3.0	0.0		2.0	0.05	0.0	4.4		0.0	0.1
10 25 77	0.0	0.02	0.0	0.00	3.8	0.0	0.00	0.1	3.3	0.01	3.0	0.0	0.0	3.0	0.02	0.0	4.5	0.0	0.0	0.0
11 28 77	0.0	0.00			3.4	0.0	0.00	0.1	1.3		2.8	0.0		2.3	0.00	0.0	3.9		0.0	0.1
12 20 77	0.0	0.00			3.0	0.0	0.00	0.0	1.3		2.8	0.0		1.8	0.01	0.0	4.2		0.1	0.0
1 24 78	0.1	0.02	0.0	0.00	3.1	0.0	0.00	0.2	0.9	0.00	2.2	0.0	0.0	1.7	0.00	0.0	3.2	0.0	0.0	0.0
3 7 78	0.1	0.00			3.2	0.0	0.01	0.1	1.2		3.0	0.0		2.0	0.01	0.0	3.3		0.0	0.0
4 18 78	0.1	0.00	0.0	0.00	3.4	0.0	0.00	0.1	1.4	0.07	3.0	0.0	0.0	2.2	0.00	0.0	3.7	0.0	0.0	0.0
5 16 78	0.0	0.01			2.6	0.0	0.00	0.1	1.3		2.7	0.0		1.7	0.02	0.0	4.2		0.2	0.0
6 14 78	0.0	0.00	0.0	0.00	3.7	0.0	0.00	0.0	1.6	0.00	3.0	0.0	0.0	2.3	0.00	0.0	3.6	0.0	0.0	0.0
7 13 78	0.0	0.01	0.0	0.00	5.4	0.0	0.00	0.2	2.2	0.03	3.8	0.1	0.0	2.3	0.00	0.1	3.8	0.0	0.1	0.0
8 15 78	0.0	0.01			4.9	0.0	0.00	0.1	1.7		3.3	0.1		1.8	0.01	0.0	3.5		0.1	0.0
10 2 78	0.0	0.01			4.8	0.0	0.00	0.1	2.3		3.1	0.0		1.8	0.01	0.0	3.4		0.0	0.0
11 7 78	0.1	0.00			5.4	0.1	0.02	0.1	2.0		3.4	0.2		3.6	0.04	0.1	3.9		0.2	0.0
12 7 78	0.1	0.00			2.8	0.0	0.01	0.2	1.4		1.8	0.0		1.7	0.03	0.0	3.1		0.1	0.0
3 21 79	0.1	0.01			3.1	0.0	0.01	0.0	1.8		2.3	0.1		2.2	0.04	0.0	4.2		0.1	0.0
4 11 79	0.0	0.00	0.2	0.00	3.0	0.0	0.00	0.1	1.2	0.10	2.5	0.0	0.0	1.6	0.00	0.0	3.3	0.0	0.0	0.2
5 16 79	0.1	0.00			2.9	0.0	0.01	0.2	1.3		2.4	0.0		1.9	0.01	0.0	3.5		0.0	0.0
6 6 79	0.0	0.00			2.5	0.1	0.01	0.1	1.2		1.9	0.0		1.2	0.00	0.0	3.7		0.0	0.0
7 7 79	0.0	0.01	0.0	0.00	4.0	0.0	0.00	0.0	1.4	0.07	2.7	0.0	0.0	1.7	0.00	0.0	3.8	0.0	0.0	0.0
7 30 79	0.0	0.00			3.3	0.0	0.00	0.0	1.6		2.6	0.0		1.8	0.01	0.0	4.5		0.0	0.0

TABLE 52. WATER QUALITY FOR SITE 3132 KNOTT COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC COND	DIG SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	NO3 M AS N	NO3 NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CH	MG/L	MILLIGRAMS PER LITER														
6	29	77	20	0.006			110	392	222	2.41	8.0		102	122	1	1.5	72	3.4					
7	26	77	18	0.02			20	387	279	4.30	7.7		201	243	1	2.1	58	0.2					
8	23	77	20	0.05			8	470	293	4.22	8.1		159	191	2	1.6	74	0.2					
9	27	77	18	0.15			220	539	285	5.09	8.0		198	239	2	1.8	55	0.2					
10	25	77	13	0.05	145		230	484	270	5.82	7.8		201	243	1	2.1	45	0.3					
11	28	77	7	0.3	503			376	243	1.61	8.0		50	60	0	2.3	130	0.5					
12	20	77	7	0.05			390	336	224	2.01	7.5		64	78	0	1.8	100	0.4					
1	23	78	1	0.5			14000	374	223	1.83	7.6		47	57	0	2.0	110	1.8					
3	7	78	4	0.1	456		1000	367	209	1.74	7.7		50	61	0	1.9	99	2.2					
4	18	78	5	0.4	2240		4100	581	414	1.36	8.1		77	92	1	3.0	230	3.9					
5	16	78	18	0.15	858*		1800	319	189	1.75	7.6		42	51	0	2.2	93	0.9					
6	14	78	23	0.02				478	297	2.68	8.2		145	173	2	2.0	99	1.1					
7	13	78	18	0.025	50*		15	461	280	2.74	8.3		128	152	2	2.1	96	0.4					
8	15	78	19	0.01	13		10	462	289	3.59	8.3		159	189	2	1.3	79	0.3					
10	2	78	18	0.0005	29*		20	584	349	3.51	8.2		211	252	3	2.0	91	0.3					
11	7	78	10	0.0006	8		3	612	412	6.21	8.1		316	379	3	2.3	63	0.3					
12	7	78	5	0.01	80		140	473	275	3.55	8.5		162	190	4	1.6	73	0.1					
1	22	79	3	1.5	50		60	244	169	1.33	7.0		15	18	0	0.8	81	5.0					
3	21	79	18	0.03	94		130	451	319	1.90	8.1	-87	100	120	1	1.4	150	0.5					
4	11	79	13	0.005	70	0.02	320	406	279	1.59	7.9	-62	57	69	0	1.5	150	1.1					
5	16	79	15	0.0000	157	0.20	250	510	297	2.05	7.7	-84	97	117	0	1.3	130	1.2					
6	6	79	17	0.01	138	0.10	500	440	292	1.96	8.4	-94	102	120	2	2.2	130	0.3					
7	7	79	19	0.001	54	0.10	35	509	341	2.08	8.6		155	180	5	1.5	130	0.1	0.0	0.23	1.05	0.15	0.01
7	31	79	22	0.007			460	538	326	1.66	8.3	-78	91	108	1	1.4	150	5.3	0.2	0.44	0.25	0.00	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 29 77	0.1	0.01			33	0.0	0.00	0.1	3.4		24	0.7		4.8	0.00	0.0	2.6		0.0	0.0
7 26 77	0.0	0.00			53	0.0	0.00	0.6	3.6		27	3.2		6.8	0.00	0.0	1.9		0.0	0.0
8 23 77	0.1	0.06			66	0.0	0.00	0.5	4.8		34	2.5		8.0	0.04	0.1	2.7		0.0	0.0
9 27 77	0.1	0.04			56	0.0	0.00	0.3	4.0		33	3.3		6.7	0.02	0.0	2.2		0.1	0.0
10 25 77	0.2	0.08	0.0	0.00	53	0.0	0.00	0.4	1.4	0.15	30	1.8	0.0	7.8	0.03	0.0	2.5	0.2	0.0	0.0
11 28 77	0.2	0.00			37	0.0	0.01	0.3	3.4		27	0.9		5.6	0.01	0.0	2.7		0.0	0.0
12 20 77	0.1	0.00			34	0.0	0.00	0.3	3.2		29	1.4		5.2	0.02	0.0	2.9		0.1	0.0
1 23 78	0.7	0.01	0.4	0.00	30	0.0	0.01	1.2	3.4	0.00	30	0.6	0.0	4.5	0.01	0.0	2.6	0.2	0.0	0.0
3 7 78	0.1	0.00			28	0.0	0.01	0.2	3.1		26	0.6		4.5	0.02	0.0	2.8		0.0	0.0
4 18 78	0.1	0.00	0.0	0.00	61	0.0	0.00	0.1	4.9	0.35	41	0.6	0.0	6.6	0.01	0.0	1.8	0.2	0.0	0.0
5 16 78	0.1	0.02			23	0.1	0.00	0.1	3.7		25	0.5		4.4	0.03	0.1	3.4		0.2	0.0
6 14 78	0.1	0.00	0.0	0.00	52	0.0	0.00	0.0	3.9	0.15	32	3.0	0.0	6.8	0.02	0.0	2.1	0.2	0.1	0.0
7 13 78	0.1	0.02	0.1	0.00	53	0.0	0.00	0.3	4.1	0.20	31	3.2	0.1	5.7	0.00	0.1	2.4	0.2	0.2	0.0
8 15 78	0.1	0.02			62	0.0	0.00	0.2	4.3		30	4.2		6.2	0.04	0.2	2.3		0.1	0.0
10 2 78	0.2	0.01	0.1	0.00	75	0.0	0.00	0.2	4.9	0.45	32	4.4	0.0	5.6	0.03	0.2	2.7	0.3	0.0	0.0
11 7 78	0.2	0.00			92	0.0	0.01	0.1	4.6		38	3.5		9.6	0.06	0.1	3.2		0.2	0.0
12 7 78	0.3	0.00			60	0.0	0.01	0.4	3.3		26	1.6		5.5	0.03	0.1	2.4		0.1	0.0
1 22 79	0.2	0.00			34	0.0	0.01	0.2	2.0		9.3	0.3		2.9	0.02	0.0	3.1		0.0	0.2
3 21 79	0.1	0.00			61	0.0	0.00	0.0	4.4		30	0.9		6.4	0.01	0.0	2.4		0.1	0.0
4 11 79	0.2	0.01	0.2	0.00	47	0.0	0.00	0.2	2.9	0.25	30	0.6	0.0	3.8	0.02	0.0	2.3	0.1	0.2	0.2
5 16 79	0.1	0.00			58	0.0	0.01	0.2	3.8		28	2.3		6.3	0.01	0.0	2.0		0.1	0.0
6 6 79	0.2	0.01			54	0.0	0.00	0.2	3.7		29	0.9		4.9	0.01	0.0	2.5		0.1	0.0
7 7 79	0.1	0.00	0.1	0.00	61	0.0	0.00	0.2	4.6	0.40	30	3.0	0.0	6.9	0.01	0.0	2.3	0.2	0.1	0.1
7 31 79	0.1	0.01			54	0.0	0.02	0.1	4.5		30	0.9		5.0	0.01	0.0	2.4		0.0	0.0

TABLE 53. WATER QUALITY FOR SITE 3133 KNOTT COUNTY, KENTUCKY

														NO3 & NO3 NH3 TOT TOT ORTH									
WATER		EST	SUSP	SETT	SPEC		DIS	NEUT	LAB	ACID-	ALKA-												
DATE	TEMP	DISCH	SOL	MATTER	TURB	COND	SOLID	RATIO	PH	ITY	LINITY	HCO3	CO3	CL	SO4	AS N	AS N	AS N	N	P	P04		
MO	DA	YR	DEG	C	CFS	MG/L	ML/L	JTU	UH/CM	MG/L	----- MILLIGRAMS PER LITER -----												
6	28	77	23	0.2		490	1310	993	0.99	7.3		43	53	0	1.0	700	2.5						
7	26	77	26	0.015		130	2390	2070	0.95	5.8		1	1	0	0.7	1500	0.0						
8	23	77	24	0.05		120	2060	1970	0.97	7.2		28	34	0	0.7	1400	0.1						
9	27	77	18	0.09		700	1970	1650	1.03	4.8		0	0	0	0.8	1200	0.1						
10	25	77	13	0.08	293	700	2020	1750	1.01	5.0		0	0	0	1.9	1300	0.1						
11	28	77	6	0.7	356	270	1690	1390	1.10	4.9		0	0	0	1.4	980	0.1						
12	20	77	8	0.15		30	2570	2330	0.82	3.0		0	0	0	0.9	1700	0.1						
1	24	78	2	1.0		90	1760	1390	0.93	3.2		0	0	0	0.8	1000	0.2						
3	7	78	5	0.3	405	850	1770	1490	0.81	3.3		0	0	0	1.2	1100	0.3						
4	18	78	11	0.9	46	70	3000	2330	0.98	2.8		0	0	0	1.7	1700	0.2						
5	16	78	18	0.15	26*	60	1650	1480	0.76	3.4		0	0	0	1.1	1100	0.4						
6	14	78	24	0.2			2300	1850	1.00	4.0		0	0	0	1.1	1300	0.1						
7	13	78	19	0.04	52*	10	1990	1740	0.94	6.0		2	2	0	1.7	1300	0.1						
8	15	78	25	0.03	27*	7	1750	1420	0.95	7.2		12	15	0	1.4	1100	0.1						
10	2	78	17	0.007	23*	4	2170	1800	0.94	7.5		20	24	0	1.6	1300	0.1						
11	7	78	10	0.005	5	3	2250	1860	1.01	7.4	-21	25	30	0	2.1	1400	0.1						
12	7	78	6	1.0	4280	3900	957	645	1.22	6.8		25	31	0	0.7	430	0.1						
1	23	79	0	0.2	88	110	2210	1690	0.75	3.2	260	0	0	0	0.7	1300	0.2						
3	21	79	15	0.3	116	160	2940	2680	0.71	2.9	400	0	0	0	1.5	2000	0.0						
4	11	79	19	0.04	171	350	2660	2140	0.83	2.9	350	0	0	0	1.0	1600	0.1						
5	16	79	15	0.02	62	170	3190	2490	0.86	2.9	350	0	0	0	0.8	1800	0.2						
6	6	79	16	0.01	23	170	1800	1620	0.81	3.6	74	0	0	0	0.7	1200	0.2						
7	7	79	23	0.01	9	45	2200	1520	1.11	4.6	6	0	0	0	6.7	1100	0.3	0.0	0.29	2.70	0.25	0.01	
7	31	79		0.015	125	210	1620	1280	0.95	6.8	-2	8	10	0	1.2	940	0.1	0.0	0.09	1.15	0.00	0.01	

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 28 77	0.6	0.02			160	0.0	0.00	0.7	7.5		75	1.0		4.8	0.06	0.1	1.7		0.0	0.0
7 26 77	0.2	0.04			330	0.1	0.00	0.2	9.8		160	3.0		13	0.12	0.1	4.9		0.2	0.1
8 23 77	0.5				330	0.1	0.00	0.4	13		140	2.3		12	0.13	0.2	4.4		0.1	0.1
9 27 77	10				260	0.1	0.02	5.1	7.0		140	3.3		8.4	0.19	0.1	7.0		0.2	0.3
10 25 77	2.0	0.06	0.1	0.00	290	0.1	0.02	1.2	1.9	0.85	140	3.1	0.1	10	0.13	0.1	5.9	2.9	0.2	0.3
11 28 77	0.3	0.01			250	0.0	0.00	12	6.3		120	2.1		6.9	0.12	0.1	4.3		0.2	0.2
12 20 77	24	0.01			290	0.1	0.00	44	6.9		180	4.4		8.3	0.24	0.2	9.8		0.5	0.4
1 24 78	10	0.04	0.0	0.00	200	0.1	0.02	23	5.0	0.55	110	2.1	0.0	7.0	0.14	0.1	5.9	2.2	0.2	0.2
3 7 78	16	0.07			190	0.1	0.05	34	5.0		110	2.7		6.5	0.18	0.1	6.4		0.2	0.2
4 18 78	34	0.02	0.0	0.01	310	0.1	0.08	35	7.1	1.5	220	7.3	0.1	11	0.33	0.1	12	3.2	0.3	0.6
5 16 78	13	0.04			170	0.1	0.04	14	5.4		110	2.0		6.7	0.19	0.1	8.4		0.4	0.3
6 14 78	6.6	0.04	0.1	0.00	290	0.1	0.02	0.3	8.8	1.5	160	4.5	0.0	12	0.19	0.1	8.6	4.5	0.3	0.2
7 13 78	0.6	0.05	0.0	0.00	250	0.1	0.01	0.3	9.8	0.90	150	4.0	0.2	12	0.14	0.2	5.5	2.7	0.4	0.1
8 15 78	0.7	0.05			230	0.0	0.01	0.4	8.5		110	2.0		8.6	0.11	0.6	3.4		0.4	0.0
10 2 78	0.6	0.04	0.0	0.00	280	0.0	0.01	0.2	8.9	1.5	140	0.4	0.1	11	0.11	0.5	2.5	3.4	0.4	0.0
11 7 78	0.5	0.03			290	0.0	0.01	0.2	7.7		160	0.2		21	0.13	0.3	2.2		0.5	0.0
12 7 78	0.5	0.00			120	0.1	0.01	0.3	4.7		55	0.7		3.4	0.07	0.3	2.1		0.4	0.0
1 23 79	14	0.02			210	0.1	0.05	45	4.2		110	2.0		5.3	0.19	0.3	2.2		0.5	0.4
3 21 79	33	0.05			320	0.1	0.09	64	5.9		160	3.6		10	0.35	0.4	11		1.0	0.5
4 11 79	38	0.03	0.2	0.01	310	0.1	0.09	42	5.6	1.5	140	3.2	0.1	8.7	0.32	0.2	8.5	2.5	0.7	0.7
5 16 79	35	0.03			360	0.1	0.09	41	10		170	5.0		15	0.43	0.2	14		0.6	1.2
6 6 79	8.4	0.03			220	0.1	0.05	10	5.7		110	3.0		7.2	0.18	0.3	8.4		0.3	0.3
7 7 79	5.5	0.04	0.0	0.00	250	0.1	0.02	0.2	9.2	1.5	140	3.5	0.1	12	0.18	0.2	9.0	2.3	0.4	0.2
7 31 79	0.4	0.04	0.0	0.00	210	0.1	0.02	0.4	5.3	1.0	96	2.2	0.2	5.9	0.10	0.2	5.1	1.8	0.3	0.1

TABLE 54. WATER QUALITY FOR SITE 3141 KNOX COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NC03	CO3	CL	SO4	MO3 AS N	2MO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PD4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
6 11 79	17	0.025	26*		40									0.9	14						
6 29 79	20	0.002	47	0.30	150	143	90	6.02	7.8	-57	66	79	0	1.4	12	0.0	0.0	0.08	0.95	0.05	0.01
7 28 79	21	0.03	3	0.01	30	74	44	1.70	7.5	-12	16	20	0	0.6	14	0.0		0.01		0.00	0.01
10 17 79	13	0.015	7		10	75	48	2.52	6.9	-12	20	24	0	0.8	13	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 11 79	0.2	0.01	0.0	0.00	3.7	0.0	0.06	0.8	1.3	0.03	3.0	0.0	0.0	2.1	0.03	0.0	4.8	0.0	0.0	0.0
6 29 79	0.1	0.01			13	0.0	0.00	0.2	2.6		8.8	2.2		3.0	0.00	0.0	3.5		0.0	0.0
7 28 79	0.1	0.02			3.5	0.2	0.03	0.2	1.4		2.7	0.0		2.0	0.07	0.4	3.6		1.1	0.0
10 17 79	0.0	0.01			5.1	0.0	0.00	0.0	1.3		4.0	0.0		2.4	0.01	0.0	4.2		0.0	0.0

TABLE 55. WATER QUALITY FOR SITE 3142 KNOX COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 3 77	21	0.01			4	411	212	1.43	6.9		35	43	0	2.8	120						
7 12 77	26	0.04			10	657	375	1.17	7.0		22	27	0	3.6	260						
8 4 77	26	0.04			10	461	297	1.74	7.1		25	31	0	3.6	160			2.7			
9 1 77	26	0.015			4	423	225	2.05	6.9		42	51	0	1.6	110			1.6			
10 6 77	17	0.02			4	420	278	1.35	7.2		48	58	0	2.0	160			1.3			
11 2 77	16	0.02	23		0	459	283	1.57	7.6		52	63	0	1.9	150			0.8			
12 1 77	11	0.3	59*		4	446	271	1.58	7.4		50	61	0	0.9	140			3.8			
12 28 77	2	0.03	1		6	485	254	1.53	7.7		28	34	0	1.6	150			0.9			
2 1 78	3	0.1			8	574	381	1.63	7.9		64	77	0	1.3	200			2.7			
3 16 78	4	0.1			40	420	289	1.32	7.9		42	50	0	1.5	170			2.0			
4 11 78	14	0.07	21		4	496	311	1.67	7.8		57	69	0	1.9	170			1.5			
5 10 78	25	0.02	28*		25	411	240	1.52	7.9		58	70	0	1.4	130			0.8			
6 7 78	23	0.06	67*		45	443	250	1.65	7.7		59	72	0	1.1	130			0.2			
7 17 78	22	0.4	122*		50	419	262	1.62	7.8		41	50	0	1.7	150			0.4			
8 9 78	25	0.05	36*		40	415	229	1.32	8.0		54	65	0	1.5	130			0.4			
9 21 78	21	0.0001	68*		10	284	156	0.90	5.4		0	0	0	1.6	94			4.1			
11 1 78	15	0.0001	18		2	284	175	1.19	7.7	-28	33	40	0	1.8	100			0.0			
11 30 78	9	0.003	3		8	416	253	1.76	8.0		56	67	0	0.8	130			0.0			
1 26 79	2	0.01	12		7	581	375	1.30	7.9	-52	56	67	0	1.1	220			1.4			
3 9 79	8	0.015	9		4	602	449	1.28	7.9		55	66	0	1.3	280			1.8			
4 22 79	17	0.009	22		15	488	352	1.42	7.8	-50	55	66	0	1.1	210			1.1			
5 11 79	23	0.008	44	0.35	20	409	335	1.01	7.5		47	57	0	0.8	220			0.7			
6 7 79	22	0.01	20	0.01	45	400	199	1.51	8.1	-51	57	68	1	1.1	100			0.6			
6 29 79	19	0.003	47	0.30	60	491	334	1.31	8.1	-56	60	72	1	1.2	200	0.5	0.1	0.18	1.25	0.10	0.03
7 28 79	26	0.04	29	1.0	100	429	238	1.58	8.0	-52	59	71	0	1.4	120	0.5	0.1	0.09	0.75	0.00	0.01
10 17 79	13	0.03	9		15	472	282	1.67	8.0	-58	70	84	1	1.6	150	0.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 3 77	0.1	0.00			32	0.0	0.00	0.1	3.4		21	0.0		5.5	0.19	0.0	1.6		0.0	0.0
7 12 77	0.1	0.00			51	0.0	0.00	0.2	4.8		40	0.8		5.4	0.06	0.1	0.6		0.0	0.0
8 4 77	0.1	0.00			51	0.0	0.00	0.2	4.8		40	0.8		5.4	0.03	0.0	0.6		0.0	0.0
9 1 77	0.1	0.00			42	0.0	0.00	0.2	3.5		28	0.1		5.6	0.02	0.0	2.2		0.0	0.0
10 6 77	0.1	0.00	0.0	0.00	44	0.0	0.00	0.1	3.5	0.09	25	0.7	0.0	5.3	0.02	0.0	2.4	0.2	0.0	0.0
11 2 77	0.1	0.03			46	0.0	0.00	0.1	3.1		31	0.6		5.2	0.02	0.0	2.8		0.1	0.0
12 1 77	0.1	0.02			40	0.0	0.00	0.2	2.7		31	1.6		4.1	0.02	0.0	3.4		0.1	0.0
12 28 77	0.1	0.00	0.0	0.00	39	0.0	0.00	0.1	3.0	0.30	30	1.3	0.0	5.4	0.02	0.0	2.9	0.2	0.0	0.0
2 1 78	0.1	0.00			60	0.0	0.00	0.1	3.6		46	1.6		6.0	0.04	0.0	3.5		0.0	0.0
3 16 78	0.1	0.00			36	0.0	0.00	0.1	3.0		33	1.2		4.5	0.03	0.0	3.2		0.2	0.0
4 11 78	0.1	0.00	0.0	0.00	47	0.0	0.00	0.0	2.8	0.01	40	1.1	0.0	5.5	0.03	0.1	2.6	0.0	0.2	0.0
5 10 78	0.1	0.00			31	0.0	0.00	0.1	2.4		28	0.7		5.0	0.01	0.0	2.0		0.1	0.0
6 7 78	0.1	0.00			32	0.0	0.00	0.1	2.4		34	0.7		4.9	0.03	0.1	2.3		0.2	0.0
7 17 78	0.1	0.01	0.0	0.00	43	0.0	0.01	0.1	4.4	0.07	31	1.0	0.0	4.1	0.00	0.1	1.9	0.1	0.2	0.0
8 9 78	0.1	0.02			26	0.1	0.01	0.2	3.0		25	0.7		3.3	0.06	0.2	2.1		0.2	0.0
9 21 78	0.1	0.01			19	0.0	0.01	0.2	2.0		11	0.3		4.0	0.03	0.1	2.6		0.2	0.0
11 1 78	0.1	0.00			20	0.0	0.00	0.0	2.1		17	0.0		4.3	0.01	0.1	2.6		0.1	0.0
11 30 78	0.1	0.00			46	0.0	0.00	0.1	3.4		27	0.7		5.8	0.02	0.1	2.0		0.1	0.0
1 26 79	0.2	0.00			59	0.0	0.03	0.1	3.2		34	1.2		6.3	0.04	0.1	3.2		0.0	0.3
3 9 79	0.1	0.00			67	0.0	0.02	0.1	3.1		46	1.0		6.3	0.04	0.0	3.0		0.1	0.0
4 22 79	0.1	0.01			55	0.0	0.01	0.1	2.1		39	0.4		4.3	0.02	0.0	2.2		0.1	0.0
5 11 79	0.1	0.00			39	0.0	0.02	0.1	2.2		30	0.4		4.1	0.02	0.1	3.7		0.1	0.0
6 7 79	0.1	0.00			28	0.0	0.02	0.1	2.2		20	0.4		4.2	0.00	0.0	2.9		0.1	0.0
6 29 79	0.1	0.01			47	0.0	0.00	0.1	3.0		35	0.2		5.1	0.01	0.0	2.9		0.1	0.0
7 28 79	0.1	0.02			37	0.0	0.01	0.0	2.8		25	0.9		3.3	0.00	0.1	2.9		0.1	0.0
10 17 79	0.1	0.00			44	0.0	0.00	0.1	3.5		32	0.5		5.1	0.02	0.1	2.5		0.1	0.0

TABLE 56. WATER QUALITY FOR SITE 3143 KNOX COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 3 77	17	0.009			30	46	46	1.69	7.0		10	12	0	1.9	18						
7 12 77	20	0.004			35	73	52	1.60	6.7		11	14	0	0.8	22	0.4					
8 4 77	22	0.002			30	96	48	1.94	6.3		11	14	0	1.3	18	0.0					
9 1 77	21	0.001			10	82	52	1.70	6.6		11	14	0	0.9	22	0.0					
10 6 77	14	0.009			10	95	52	1.72	7.2		14	17	0	1.1	20	0.0					
11 2 77	16	0.015	17		4	97	53	1.67	7.2		10	12	0	1.0	22	0.0					
12 1 77	10	0.7	55*		20	63	37	1.26	6.9		3	4	0	0.3	18	0.2					
12 28 77	2	0.2	2		4	65	42	1.19	7.3		4	5	0	0.6	21	0.2					
2 1 78	2	0.2			10	67	41	1.49	6.8		6	7	0	0.8	19	0.2					
4 11 78	10	0.07	26		0	67	47	1.41	6.9		7	8	0	1.1	21	0.2					
5 10 78	25	0.2	24*		25	63	47	1.27	6.9		7	8	0	1.1	22	0.2					
6 7 78	17	0.05			15	71	49	1.47	6.7		8	10	0	0.8	21	0.3					
7 17 78	18	0.007	39*		15	74	52	1.60	7.0		8	10	0	1.0	22	0.1					
8 9 78	20	0.1	35*		45	71	45	1.44	6.9		10	12	0	0.9	18	0.2					
11 30 78	10	0.02	1		7	83	50	1.52	6.9		10	12	0	0.8	21	0.2					
1 26 79	4	0.025			7	61	44	1.08	6.7	2	3	4	0	1.7	22	0.1					
3 9 79	8	0.015	9		6	60	43	1.17	6.5	-1	3	4	0	0.6	22	0.1					
4 23 79	14	0.01	10		35	59	44	1.31	7.0	0	7	8	0	0.8	21	0.2					
5 11 79	15	0.03	11	0.00	35	57	42	1.65	6.6	1	11	13	0	0.6	16	0.1					
6 7 79	16	0.008	12		25	59	41	1.72	6.3	-2	10	12	0	0.5	16	0.1					
6 29 79	17	0.004	11		15	67	47	1.65	6.8		7	9	0	0.9	20	0.1	0.0	0.00	0.80	0.05	0.00
7 28 79	18	0.08	20		35	67	43	1.66	7.0	1	8	10	0	0.6	17	0.1	0.0	0.34	0.60	0.15	0.01
10 17 79	14	0.02	6		20	71	45	1.68	6.6	-4	11	13	0	0.8	17	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 3 77	0.0	0.00			3.9	0.0	0.00	0.1	1.2		3.6	0.0		2.5	0.00	0.0	3.8		0.0	0.0
7 12 77	0.0	0.00			5.1	0.0	0.00	0.1	2.1		4.0	0.0		2.9	0.05	0.2	3.2		0.0	0.0
8 4 77	0.0	0.00			4.4	0.0	0.00	0.1	1.7		4.2	0.0		3.1	0.00	0.0	4.2		0.0	0.0
9 1 77	0.0	0.00			5.0	0.0	0.00	0.1	2.0		4.2	0.0		3.3	0.01	0.0	3.8		0.0	0.0
10 6 77	0.0	0.02	0.0	0.00	5.3	0.0	0.00	0.1	1.4	0.01	3.7	0.0	0.0	3.0	0.00	0.0	4.1	0.0	0.0	0.0
11 2 77	0.0	0.01			5.9	0.0	0.00	0.1	1.4		4.4	0.0		2.7	0.00	0.0	4.1		0.0	0.0
12 1 77	0.0	0.01			3.2	0.0	0.00	0.1	1.1		2.8	0.0		1.5	0.01	0.0	3.4		0.1	0.0
12 28 77	0.1	0.00	0.0	0.00	3.1	0.0	0.00	0.0	2.4	0.00	3.2	0.0	0.1	1.8	0.00	0.0	3.1	0.0	0.0	0.0
2 1 78	0.0	0.00			3.7	0.0	0.00	0.0	1.4		3.6	0.0		2.2	0.00	0.0	3.2		0.0	0.0
4 11 78	0.1	0.00	0.0	0.00	4.2	0.0	0.00	0.3	1.3	0.00	3.9	0.0	0.0	2.4	0.00	0.0	3.6	0.0	0.0	0.0
5 10 78	0.0	0.01			4.1	0.0	0.00	0.1	1.1		3.7	0.0		1.9	0.01	0.0	3.5		0.1	0.0
6 7 78	0.1	0.00			4.1	0.0	0.00	0.1	1.5		4.1	0.0		2.6	0.02	0.0	3.8		0.2	0.0
7 17 78	0.2	0.02	0.0	0.00	4.9	0.0	0.00	0.3	1.8	0.00	4.5	0.0	0.0	2.4	0.00	0.1	4.3	0.0	0.3	0.0
8 9 78	0.1	0.02			3.6	0.1	0.01	0.2	1.4		3.4	0.0		1.9	0.04	0.2	3.7		0.2	0.0
11 30 78	0.0	0.00			4.8	0.0	0.00	0.0	1.4		4.0	0.0		2.4	0.01	0.0	3.8		0.0	0.0
1 26 79	0.1	0.00			3.9	0.0	0.01	0.1	1.2		3.1	0.0		1.8	0.01	0.0	3.1		0.0	0.3
3 9 79	0.2	0.01	0.0	0.00	4.0	0.0	0.01	0.2	1.0	0.15	3.4	0.0	0.0	1.4	0.02	0.0	3.1	0.0	0.0	0.0
4 23 79	0.0	0.01	0.0	0.00	4.1	0.0	0.01	0.1	1.2	0.01	3.5	0.0	0.0	1.8	0.01	0.0	3.4	0.0	0.0	0.1
5 11 79	0.1	0.00			4.1	0.1	0.03	0.1	1.2		3.2	0.0		1.6	0.04	0.1	3.7		0.0	0.0
6 7 79	0.1	0.00			4.1	0.0	0.00	0.1	1.2		3.3	0.0		1.7	0.00	0.0	3.7		0.0	0.0
6 29 79	0.0	0.01			5.2	0.0	0.00	0.0	1.4		4.0	0.0		2.0	0.00	0.0	4.0		0.0	0.0
7 28 79	0.1	0.00			4.0	0.0	0.03	0.0	1.5		3.4	0.0		1.9	0.01	0.0	4.3		0.0	0.0
10 17 79	0.0	0.01			4.2	0.0	0.00	0.0	1.3		3.8	0.0		1.8	0.01	0.0	4.0		0.0	0.0

TABLE 57. WATER QUALITY FOR SITE 3145 KNOX COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER								
6 3 77	17	0.06			10	92	59	3.04	6.7			23	28	0	1.3	14						
7 12 77	22	0.01				95	61	3.36	6.8			32	39	0	0.8	11	0.3					
8 4 77	24	0.004			50	91	59	3.36	6.6			30	36	0	0.9	12	0.0					
2 1 78	1	0.25			0	67	40	2.07	7.1			11	14	0	0.8	13	0.0					
3 16 78	4	0.4			20	62	43	1.93	6.6			11	13	0	1.5	15	0.1					
4 11 78	11	0.1	48		20	74	51	2.26	7.0			11	13	0	1.4	17	0.2					
5 10 78	23	0.2	22*		20	69	50	2.05	7.2			12	15	0	1.5	16	0.2					
6 7 78	20	0.07	356*		950	89	59	2.16	7.1			17	21	0	1.4	20	0.4					
7 17 78	21	0.02	58*		10	88	59	2.57	7.4			20	25	0	0.9	17	0.1					
8 9 78	20	0.08	55*		50	84	50	2.47	7.2			20	24	0	1.0	14	0.2					
9 21 78	23	0.0006	57*		45	266	167	1.77	8.1			67	81	1	1.0	66	0.2					
11 1 78	15	0.0002	19*		20	286	177	1.91	7.7	-60		65	79	0	1.5	70	0.0					
11 30 78	9	0.003	0		8	83	50	2.26	7.2			16	19	0	1.1	15	0.2					
1 26 79	2	0.1			10	69	45	1.47	6.9			6	7	0	1.7	19	0.1					
3 9 79	6	0.015	35		60	94	55	1.88	6.9	-5		10	12	0	1.4	21	0.5					
4 23 79	15	0.08	41		150	114	76	1.74	7.6			20	25	0	1.5	28	1.2					
5 11 79	17	0.03	529	0.10		131	89	1.34	6.8			9	11	0	2.1	48						
6 7 79	20	0.02	130		220	101	62	1.94	7.0	-12		20	24	0	1.2	20	0.7					
7 28 79	22	0.06	27*	3.0	127	74		1.87	7.4			25	30	0	0.8	27	0.2	0.0	0.09	0.90	0.25	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
6 3 77	0.0	0.00			6.1	0.0	0.00	4.3	2.5		4.1	2.8		2.7	0.17	0.0	3.7		0.0	0.0
7 12 77	0.0	0.01			5.2	0.0	0.00	1.5	2.0		4.8	2.9		2.6	0.01	0.1	4.5		0.0	0.0
8 4 77	0.0	0.00			6.2	0.0	0.00	1.8	2.0		4.7	2.4		2.8	0.02	0.0	4.1		0.0	0.0
2 1 78	0.1	0.00			3.4	0.0	0.00	0.1	1.1		3.3	0.0		2.8	0.00	0.0	3.9		0.0	0.0
3 16 78	0.0	0.01			3.8	0.0	0.00	0.1	0.9		3.6	0.0		3.2	0.00	0.0	3.8		0.0	0.0
4 11 78	0.1	0.01	0.0	0.00	5.2	0.0	0.00	0.1	1.4	0.08	4.6	0.2	0.0	4.0	0.02	0.0	4.5	0.0	0.2	0.0
5 10 78	0.1	0.01			4.9	0.0	0.00	0.2	1.6		3.6	0.0		3.9	0.02	0.0	4.6		0.1	0.0
6 7 78	0.1	0.00			6.0	0.0	0.00	0.2	1.9		4.6	0.0		5.4	0.02	0.0	3.6		0.1	0.0
7 17 78	0.0	0.01	0.0	0.00	6.0	0.0	0.00	0.1	2.0	0.02	4.7	0.0	0.0	4.9	0.00	0.0	4.5	0.0	0.1	0.0
8 9 78	0.1	0.02			4.6	0.1	0.01	0.3	1.7		3.8	0.0		3.5	0.04	0.1	3.9		0.2	0.0
9 21 78	0.2	0.01			10	0.0	0.00	0.2	3.2		7.5	0.1		29	0.01	0.0	3.9		0.0	0.0
11 1 78	0.1	0.01	0.0	0.00	10	0.0	0.00	0.1	2.7	0.20	7.4	0.0	0.0	38	0.00	0.0	3.8	0.1	0.0	0.0
11 30 78	0.1	0.00			4.9	0.0	0.01	0.0	1.7		3.4	0.0		4.4	0.02	0.0	4.1		0.0	0.0
1 26 79	0.1	0.00			4.7	0.0	0.01	0.1	1.2		3.4	0.1		2.2	0.03	0.0	4.1		0.0	0.3
3 9 79	0.2	0.00			5.9	0.0	0.01	0.3	1.3		4.4	0.1		4.6	0.03	0.0	3.8		0.0	0.0
4 23 79	0.1	0.00	0.0	0.00	7.7	0.0	0.01	0.1	1.7	0.07	5.6	0.1	0.0	5.7	0.00	0.0	3.7	0.0	0.0	0.0
5 11 79	0.3	0.01			8.6	0.0	0.00	0.3	2.3		6.6	0.2		5.5	0.02	0.0	4.3		0.1	0.1
6 7 79	0.2	0.01			6.2	0.0	0.00	0.4	1.7		4.5	0.2		3.8	0.01	0.0	4.4		0.0	0.0
7 28 79	0.0	0.01	0.0	0.00	8.9	0.0	0.00	0.6	1.8	0.03	5.4	0.0	0.0	3.4	0.01	0.0	4.8	0.0	0.0	0.0

TABLE 58. WATER QUALITY FOR SITE 3151 LAUREL COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	BIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
5 26 77	20	0.04			15	99	44	4.52	7.4		27	33	0	2.1	6	0.1					
7 6 77	22	0.008			45	62	43	3.31	6.7		20	25	0	1.4	8	0.5					
8 1 77	22	0.015			70	79	47	5.74	7.4		32	39	0	1.0	6	0.0					
8 30 77	21	0.005			50	82	48	4.72	6.7		25	31	0	1.1	8	0.0					
10 4 77	14	0.2	34		45	74	47	2.51	6.3		14	17	0	0.9	13	0.2					
11 1 77	12	0.08	25		8	71	43	2.67	6.9		14	17	0	1.5	11	0.0					
11 29 77	7	0.9	117		130	81	46	3.29	7.5		17	21	0	1.6	11	0.2					
12 27 77	1	0.2	4		4	65	41	2.74	7.3		15	18	0	0.8	10	0.1					
1 30 78	0	0.8			25	47	31	3.76	7.1		12	15	0	1.0	5	0.2					
3 14 78	10	0.6	105		75	49	34	2.30	7.0		11	13	0	1.3	9	0.3					
4 12 78	15	0.1	19		20	49	37	2.61	7.1		13	16	0	1.8	8	0.1					
5 8 78	15	1.5	857*		1300	157	88	2.90	7.6		50	61	0	3.6	21	0.2					
6 6 78	21	0.03			40	76	49	2.77	7.1		20	24	0	3.9	10	0.3					
8 7 78	22	0.02	34*		40	91	54	3.94	7.5		32	39	0	1.2	9	0.2					
12 4 78	9	0.06	21		45	77	44	2.06	6.9		12	15	0	1.2	14	0.2					
1 11 79	2	0.05			6	43	30	1.92	6.9	-1	7	8	0	1.8	9	0.1					
3 6 79	9	0.015	22		15	46	41	1.50	6.9	-6	9	11	0	0.8	16	0.1					
4 10 79	10	0.02	20	0.00	60	47	37	1.86	6.9		9	11	0	1.2	12	0.1					
5 17 79	15	0.001	17		80	55	34	2.19	7.1	-5	10	12	0	1.3	9	0.2					
6 1 79	20	0.0001	29		70	52	40	2.60	7.1	-5	16	20	0	1.1	9	0.1					
7 12 79	17	0.008	53	0.02	170	78	53	2.49	7.5		19	23	0	1.1	15	0.2	0.0	0.04	1.00	0.10	0.00
7 26 79	22	0.1	749		2100	203	101	2.15	7.7	-32	42	51	0	1.2	36	0.1	0.0	0.21	0.75	0.20	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 26 77	0.0	0.00			5.0	0.0	0.01	0.1	1.1		2.4	0.0		2.8	0.03	0.0	3.4		0.0	0.0
7 6 77	0.1	0.00			5.6	0.0	0.01	0.1	1.6		2.4	0.0		2.6	0.00	0.0	3.4		0.0	0.0
8 1 77	0.0	0.00			7.6	0.0	0.00	0.1	1.6		2.7	0.0		2.4	0.01	0.0	3.1		0.0	0.0
8 30 77	0.0	0.00			7.7	0.0	0.00	0.2	2.2		3.0	0.0		3.0	0.01	0.0	3.6		0.0	0.0
10 4 77	0.0	0.05	0.0	0.00	7.1	0.0	0.00	0.2	1.9	0.02	2.4	0.1	0.0	2.2	0.02	0.1	4.8	0.0	0.2	0.0
11 1 77	0.0	0.01			6.0	0.0	0.00	0.1	1.2		2.7	0.1		2.3	0.00	0.0	4.3		0.0	0.0
11 29 77	0.1	0.00			9.5	0.0	0.00	0.1	2.1		2.5	0.1		1.9	0.00	0.0	2.8		0.0	0.0
12 27 77	0.0	0.00			5.6	0.0	0.00	0.2	1.2		2.7	0.2		2.1	0.01	0.0	4.1		0.1	0.0
1 30 78	0.0	0.00	0.0	0.00	4.0	0.0	0.00	0.1	0.9	0.05	2.0	0.0	0.0	1.6	0.00	0.0	3.5	0.0	0.0	0.0
3 14 78	0.4	0.01			4.6	0.0	0.00	0.6	1.1		1.9	0.1		1.4	0.01	0.0	3.0		0.1	0.0
4 12 78	0.1	0.00	0.0	0.00	4.0	0.0	0.00	0.1	1.2	0.01	2.1	0.0	0.0	2.2	0.00	0.0	3.9	0.0	0.0	0.0
5 8 78	0.2	0.01			19	0.0	0.00	0.2	1.9		4.1	0.0		1.9	0.01	0.0	2.4		0.1	0.0
6 6 78	0.1	0.00	0.0	0.00	6.7	0.0	0.00	0.2	1.4	0.07	2.7	0.2	0.0	2.6	0.02	0.0	3.9	0.0	0.2	0.0
8 7 78	0.1	0.02			8.3	0.1	0.01	0.2	2.0		2.8	0.1		2.0	0.05	0.2	3.6		0.2	0.0
12 4 78	0.1	0.00			7.7	0.0	0.01	0.1	2.0		2.0	0.0		1.6	0.02	0.0	3.1		0.1	0.0
1 11 79	0.0	0.00			4.2	0.0	0.00	0.1	1.0		1.5	0.0		1.4	0.00	0.0	3.3		0.0	0.1
3 6 79	0.1	0.01	0.8	0.00	5.1	0.0	0.02	0.1	1.1	0.20	2.1	0.0	0.0	1.6	0.02	0.0	3.4	0.0	0.0	0.4
4 10 79	0.1	0.00	0.2	0.00	5.1	0.0	0.01	0.2	1.1	0.15	2.1	0.1	0.0	1.6	0.01	0.0	3.3	0.0	0.0	0.2
5 17 79	0.0	0.01			3.9	0.0	0.00	0.1	1.0		2.0	0.1		1.8	0.01	0.0	3.7		0.1	0.0
6 1 79	0.1	0.00			5.2	0.0	0.01	0.1	1.2		1.8	0.0		1.8	0.01	0.0	4.0		0.0	0.4
7 12 79	0.1	0.01	0.0	0.00	9.8	0.0	0.00	0.2	1.4	0.10	2.9	0.1	0.0	1.6	0.00	0.0	3.7	0.0	0.0	0.0
7 26 79	0.4	0.01			22	0.0	0.00	0.4	2.2		5.3	0.1		1.4	0.01	0.0	2.9		0.0	0.0

TABLE 59. WATER QUALITY FOR SITE 3152 LAUREL COUNTY, KENTUCKY

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC COND		DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																							
7	6	77	24	0.004			20	76	36	6.90	7.0		20	25	0	0.5	4	0.2					
8	1	77	22	0.006			55	70	39	4.21	7.3		27	33	0	0.7	6	0.0					
8	30	77	22	0.003			20	63	39	5.69	6.4		20	24	0	0.8	5	0.1					
10	4	77	18	0.06	259		350	96	61	2.04	6.3		13	16	0	1.5	22	0.8					
11	1	77	13	0.007	37		45	92	49	2.20	6.9		13	16	0	1.1	16	0.2					
11	29	77	8	0.3	203		200	113	64	2.25	7.3		13	16	0	1.9	23	0.8					
12	28	77	0	0.02	62		20	133	57	2.74	7.0		16	19	0	1.4	19						
1	30	78	1	0.1			75	62	40	2.50	7.1		12	15	0	1.2	12	0.2					
3	14	78	9	0.1	98		160	77	45	2.02	7.0		12	15	0	1.3	16	0.4					
4	12	78	16	0.02	8		0	104	45	2.77	7.4		17	21	0	1.0	13	0.1					
5	8	78	14	0.8	391*		240	102	45	4.71	7.2		22	27	0	6.1	6	0.6					
6	7	78	20	0.01			15	102	61	8.17	7.6		43	53	0	1.1	5	0.3					
8	7	78	22	0.004	52*		45	102	51	2.11	7.2		20	25	0	1.1	16	0.2					
10	30	78	13	0.0004	40		25	93	55	2.08	7.5	-14	24	29	0	1.8	16	0.1					
12	4	78	10	0.09	51		120	92	48	2.12	7.0		16	20	0	0.8	18	0.1					
1	11	79	2	0.005			25	107	58	1.84	7.3	-12	15	18	0	2.1	24	0.1					
3	6	79	10	0.002	35		55	216	129	2.17	7.6	-25	36	44	0	1.5	56	0.5					
4	10	79	12	0.005	27	0.00	15	161	95	1.56	7.4	-24	24	29	0	1.1	48	0.1					
5	17	79	14	0.0000	18		7	144	77	1.73	7.5	-16	22	27	0	0.7	33	0.3					
6	1	79	21	0.0000	33		55	155	94	1.67	7.5	-22	30	36	0	0.9	42	0.0					
7	9	79	20	0.02	91	1.0	210	157	84	1.82	7.6	-23	26	32	0	1.1	36	0.4	0.0	0.06	1.40	0.15	0.00
7	26	79	24	0.02	128		310	145	80	1.96	7.7	-19	29	35	0	1.0	32	0.1	0.1	0.13	0.60	0.00	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	----- MILLIGRAMS PER LITER -----																		
7	6	77	0.1	0.00		3.9	0.0	0.00	1.2	1.1		3.4	2.1		2.3	0.05	0.2	1.7		0.0	0.0
8	1	77	0.0	0.00		3.6	0.0	0.00	1.0	1.0		3.0	1.8		2.2	0.00	0.0	1.7		0.0	0.0
8	30	77	0.0	0.00		3.7	0.0	0.00	0.9	1.5		3.5	2.4		2.5	0.01	0.0	2.8		0.0	0.0
10	4	77	0.1		0.0 0.00	5.8	0.0	0.01	0.2	3.5	0.02	5.7	0.4	0.0	4.0	0.03	0.1	3.0	0.0	0.2	0.0
11	1	77	0.0	0.02		4.6	0.0	0.00	1.0	1.4		4.7	1.7		2.9	0.01	0.0	2.9		0.0	0.0
11	29	77	0.2	0.00		7.4	0.0	0.01	0.2	2.6		7.2	0.3		4.0	0.01	0.0	2.7		0.0	0.0
12	28	77	0.2	0.00		5.4	0.1	0.00	0.8	2.5		6.4	0.7		3.0	0.03	0.2	3.4		0.5	0.0
1	30	78	0.0	0.00	0.0 0.00	3.5	0.0	0.00	0.2	1.3	0.06	3.9	0.2	0.0	2.6	0.00	0.0	3.3	0.0	0.0	0.0
3	14	78	0.2	0.02		4.0	0.0	0.01	0.2	1.3		4.8	0.1		2.6	0.00	0.0	2.5		0.1	0.0
4	12	78	0.1	0.00	0.0 0.00	4.2	0.0	0.00	0.6	1.5	0.01	4.7	1.5	0.0	2.9	0.00	0.0	2.3	0.0	0.0	0.0
5	8	78	0.2	0.02		4.3	0.1	0.01	0.2	1.8		4.7	0.2		2.7	0.04	0.1	1.5		0.3	0.0
6	7	78	0.0	0.00	0.0 0.00	6.0	0.0	0.00	1.2	1.0	0.06	6.2	4.6	0.0	2.6	0.00	0.0	2.3	0.0	0.0	0.1
8	7	78	0.1	0.02		4.4	0.1	0.01	0.6	1.5		4.8	1.3		2.0	0.05	0.2	2.5		0.2	0.0
10	30	78	0.0	0.00		5.1	0.0	0.01	0.4	1.5		3.8	2.5		3.0	0.02	0.0	2.6		0.0	0.2
12	4	78	0.2	0.00		5.3	0.0	0.01	0.3	2.0		5.0	0.1		1.8	0.01	0.0	2.3		0.0	0.0
1	11	79	0.1	0.00		6.1	0.0	0.00	0.3	1.2		6.4	0.2		2.5	0.01	0.1	2.9		0.0	0.1
3	6	79	0.1	0.00		13	0.0	0.01	0.3	2.1		20	0.2		4.9	0.03	0.0	2.8		0.1	0.3
4	10	79	0.1	0.00	0.1 0.00	10	0.0	0.00	0.2	1.4	0.04	10	0.2	0.0	3.9	0.02	0.0	2.2	0.0	0.0	0.1
5	17	79	0.0	0.01		7.7	0.0	0.00	1.0	1.0		8.3	2.2		3.2	0.01	0.0	2.3		0.1	0.1
6	1	79	0.0	0.00		10	0.0	0.00	0.9	1.6		9.3	1.8		4.2	0.01	0.0	2.3		0.0	0.3
7	9	79	0.3	0.00	0.0 0.00	10	0.0	0.00	0.9	1.8	0.05	8.8	0.5	0.1	3.2	0.00	0.0	1.8	0.0	0.0	0.0
7	26	79	0.1	0.01		9.0	0.0	0.01	0.3	2.4		8.4	1.0		3.4	0.02	0.0	2.0		0.1	0.0

TABLE 60. WATER QUALITY FOR SITE 3153 LAUREL COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							----- MILLIGRAMS PER LITER -----								
8 30 77	22	0.04			30	508	333	0.82	3.1			0	0	0	0.5	240	0.1					
10 4 77	12	0.08	17		30	480	308	1.14	4.0			0	0	0	0.5	200	0.1					
11 1 77	12	0.1	27		0	493	345	0.97	3.7			0	0	0	1.0	240	0.0					
11 29 77	7	2.5	17		7	219	119	0.91	4.0			0	0	0	1.3	77	0.1					
12 27 77	1	0.03	4		4	442	279	1.12	3.7			0	0	0	0.8	180	0.1					
12 13 78	6	0.25	2		5	560	352	1.00	3.8	29		0	0	0	0.5	240	0.0					
12 15 78	3	0.02	4		0	537	343	0.99	3.8	42		0	0	0	0.8	230	0.1					
1 11 79	1	0.025	29		9	453	264	1.00	4.0			0	0	0	1.7	170	0.1					
3 6 79	9	0.015			25	450	304	0.86	3.8	30		0	0	0	0.6	220	0.1					
4 10 79	10	0.01	4	0.03	1	364	245	0.81	3.8	31		0	0	0	0.7	180	0.0					
5 17 79	15	0.006	8	0.00	0	415	253	0.99	3.8	33		0	0	0	0.5	170	0.2					
6 1 79	20	0.0004	55		45	419	248	0.78	3.8	30		0	0	0	0.4	180	0.1					
7 12 79	16	0.005	11		0	352	231	0.78	3.9			0	0	0	0.5	170	0.0	0.0	0.07	0.60	0.05	0.02
7 26 79	22	0.015	11		25	349	166	0.96	3.8	18		0	0	0	0.5	110	0.0	0.0	0.09	0.60	0.00	0.00

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
----- MILLIGRAMS PER LITER -----																				
8 30 77	0.6	0.00			25	0.1	0.00	1.7	5.0		31	11		5.2	0.09	0.0	5.7		0.0	0.1
10 4 77	1.5	0.05	0.0	0.00	30	0.1	0.01	3.1	4.5	0.15	36	10	0.0	3.7	0.20	0.1	9.2	0.2	0.2	0.2
11 1 77	1.0	0.05			28	0.1	0.01	0.9	3.8		39	10		4.3	0.13	0.0	7.7		0.1	0.1
11 29 77	1.2	0.00			9.7	0.0	0.01	0.7	2.4		10.0	3.2		3.2	0.07	0.0	4.5		0.0	0.1
12 27 77	2.0	0.00			20	0.1	0.00	2.3	3.3		38	10		3.6	0.14	0.0	6.7		0.2	0.1
12 13 78	3.8	0.01			37	0.1	0.02	1.6	4.0		35	12		3.8	0.27	0.1	7.9		0.1	0.2
12 15 78	2.2	0.02			34	0.1	0.01	2.0	3.2		36	13		2.9	0.23	0.1	7.6		0.1	0.2
1 11 79	3.0	0.00			26	0.1	0.01	1.7	2.8		27	9.1		2.5	0.23	0.1	6.7		0.1	0.3
3 6 79	2.2	0.01			21	0.1	0.03	0.6	3.3		32	9.6		3.6	0.22	0.0	6.1		0.1	0.4
4 10 79	1.6	0.01	0.2	0.00	15	0.1	0.02	0.7	2.4	0.15	25	7.2	0.0	2.4	0.18	0.0	5.0	0.1	0.0	0.3
5 17 79	0.8	0.04			21	0.1	0.01	0.8	2.7		28	9.8		2.8	0.14	0.1	6.6		0.1	0.1
6 1 79	0.6	0.01			17	0.1	0.01	0.6	2.7		23	8.6		2.8	0.13	0.1	5.3		0.1	0.3
7 12 79	0.5	0.01	0.0	0.00	15	0.0	0.00	0.9	2.7	0.20	21	6.5	0.0	2.4	0.11	0.0	6.1	0.1	0.0	0.1
7 26 79	0.6	0.02			12	0.0	0.02	1.6	2.7		18	5.1		2.6	0.07	0.0	4.7		0.0	0.1

TABLE 61. WATER QUALITY FOR SITE 3156 LAUREL COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
1 30 78	0	0.7			15	47	34	2.35	7.0			11	13	0	0.8	9	0.0				
4 12 78	15	0.09	29		8	54	41	2.18	7.2			13	16	0	1.3	12	0.1				
5 8 78	16	0.4	159*		600	92	65	3.44	7.6			40	49	0	1.2	13	0.2				
6 6 78	22	0.03				79	46	2.51	7.1			19	23	0	3.8	10	0.2				
7 6 78	25	0.0004	55*		55	212	114	10.8	8.2			94	113	1	1.3	9	0.1				
8 7 78	23	0.008	46*		70	151	75	6.44	7.8			61	74	0	1.0	8	0.2				
9 22 78	21	0.0000	170*		85	373	193	2.10	8.2			69	82	1	1.6	78	0.5				
10 30 78	10	0.0000	35		85	384	249	1.45	8.0	-65		65	78	0	1.8	130	0.3				
12 4 78	9	0.001	31		85	73	41	2.28	7.0			12	15	0	0.9	13	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 30 78	0.0	0.00	0.0	0.00	3.6	0.0	0.00	0.1	1.0	0.09	2.2	0.1	0.0	1.9	0.01	0.0	3.9	0.0	0.0	0.0
4 12 78	0.1	0.00	0.0	0.00	4.8	0.0	0.00	0.2	1.5	0.01	2.5	0.3	0.0	2.5	0.01	0.0	3.4	0.0	0.0	0.0
5 8 78	0.2	0.01			13	0.1	0.00	0.2	1.4		2.4	0.1		1.9	0.02	0.1	3.1		0.2	0.0
6 6 78	0.1	0.00	0.0	0.00	6.0	0.0	0.00	0.3	1.2	0.07	2.5	0.3	0.0	2.4	0.00	0.0	3.2	0.0	0.0	0.0
7 6 78	0.1	0.01			31	0.0	0.00	0.2	2.4		4.2	0.7		2.4	0.03	0.0	3.0		0.1	0.0
8 7 78	0.1	0.02			16	0.1	0.01	0.3	1.7		2.8	0.4		1.6	0.05	0.2	2.2		0.2	0.0
9 22 78	0.2	0.02			55	0.0	0.01	0.2	3.4		6.8	0.1		2.1	0.03	0.2	0.9		0.2	0.0
10 30 78	0.2	0.01			69	0.0	0.00	0.1	4.2		4.1	0.0		0.9	0.01	0.1	0.9		0.0	0.0
12 4 78	0.2	0.00			7.7	0.0	0.00	0.1	1.8		2.0	0.2		1.4	0.01	0.0	2.7		0.0	0.0

TABLE 62. WATER QUALITY FOR SITE 3159 LAUREL COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
5 26 77	20	0.06			4	910	738	1.26	7.8			153	185	1	3.5	440	0.2				
7 6 77	22	0.015			0	542	377	1.89	8.0			117	141	1	2.2	170	2.0				
8 1 77	22	0.025			15	781	461	1.64	8.4			129	152	3	1.8	240	0.1				
12 15 78	6	0.01				670		7.5							1.7	180					
1 11 79	3	0.04	13		4	590	420	1.23	7.9			61	74	0	1.6	260	0.1				

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 26 77	0.2	0.06			83	0.0	0.01	0.3	5.9		67	0.4		41	0.04	0.1	2.7		0.2	0.0
7 6 77	0.1	0.02			42	0.0	0.02	0.0	5.4		43	0.4		27	0.01	0.1	2.1		0.0	0.0
8 1 77	0.1				61	0.0	0.00	0.1	5.3		44	0.1		31	0.02	0.0	1.0		0.0	0.0
12 15 78	0.3	0.04			68	0.0	0.00	0.2	4.1		52	0.8		21	0.03	0.1	3.2		0.1	0.0
1 11 79	0.2	0.02			53	0.0	0.01	0.1	3.4		42	0.8		14	0.05	0.2	2.9		0.2	0.1

TABLE 63. WATER QUALITY FOR SITE 3161 LAWRENCE COUNTY, KENTUCKY

WATER QUALITY DATA																					
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER											
2	2	78	1	0.07			45	89	54	1.54	7.0	11	13	0	1.1	22	0.1				
3	3	78	3	0.25			10	83	52	1.69	7.1	10	12	0	1.2	20	0.1				
4	4	78	17	0.15	21			90	57	1.72	6.3	11	14	0	1.3	23	0.1				
4	28	78	11	0.15	46*		45	71	48	1.61	7.0	8	10	0	1.1	19	0.1				
5	23	78	15	0.03	36*		35	106	73	1.41	7.4	16	20	0	1.1	32	0.1				
6	23	78	16	0.002	81*		35	130	86	1.89	7.4	28	34	0	1.4	32	0.1				
7	21	78	22	0.0000	79*		15	148	94	2.51	7.5	39	47	0	1.5	28	0.1				
8	24	78	24	0.0004	55*		15	142	90	3.85	7.7	42	51	0	4.5	17	0.1				
10	12	78	16	0.0001	34*		15	175	110	1.70	7.8	30	37	0	2.1	47	0.1				
11	21	78	11	0.0005	8		3	176	99	1.58	7.7	27	33	0	2.7	43	0.0				
1	31	79	3	0.06	2		4	75	51	1.75	6.9	9	11	0	1.0	20	0.0				
3	5	79	10	0.03	9		15	68	48	1.51	6.8	-4	7	9	0	0.6	21	0.0			
4	10	79	8	0.09	11	0.01	10	66	48	1.42	6.8		7	9	0	0.7	21	0.1			
5	24	79	16	0.006	13		25	115	77	1.63	7.6	-13	18	22	0	1.0	33	0.0			
6	27	79	15	0.002	27		10	92	67	1.62	7.4	-5	15	18	0	2.2	27	0.0 0.0	0.01	0.60	0.05 0.00
8	2	79	20	0.02	3		30	86	59	1.45	7.1	-9	13	16	0	1.1	23	0.1 0.0	0.00	0.50	0.05 0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
2 2 78	0.1	0.00	0.0	0.00	6.4	0.0	0.00	0.1	2.0	0.15	3.5	0.0	0.0	2.3	0.03	0.1	4.1	0.1	0.0	0.0
3 3 78	0.0	0.01			6.6	0.0	0.00	0.1	1.4		3.6	0.0		2.2	0.00	0.0	4.6		0.0	0.0
4 4 78	0.1	0.00	0.0	0.00	7.7	0.0	0.00	0.1	2.0	0.05	3.9	0.0	0.0	2.6	0.02	0.0	4.0	0.0	0.0	0.0
4 28 78	0.1	0.00			5.8	0.0	0.00	0.1	1.6		3.1	0.0		2.1	0.00	0.0	4.5		0.0	0.0
5 23 78	0.1	0.01			8.9	0.0	0.00	0.1	2.0		4.6	0.0		2.7	0.01	0.1	5.0		0.2	0.0
6 23 78	0.1	0.02			12	0.0	0.00	0.1	3.1		6.0	0.0		3.7	0.03	0.0	4.7		0.1	0.0
7 21 78	0.0	0.01	0.1	0.00	15	0.0	0.01	0.0	3.9	0.06	6.3	0.0	0.0	4.2	0.00	0.0	5.3	0.1	0.0	0.0
8 24 78	0.0	0.01			14	0.0	0.01	0.9	3.5		6.0	1.9		5.7	0.03	0.0	5.3		0.1	0.0
10 12 78	0.1	0.02	0.1	0.00	16	0.0	0.00	0.1	4.1	0.10	7.6	0.2	0.0	3.8	0.02	0.1	4.4	0.1	0.1	0.0
11 21 78	0.1	0.00			14	0.0	0.00	0.0	3.7		6.3	0.0		3.8	0.01	0.1	3.8		0.1	0.0
1 31 79	0.0	0.00	0.0	0.00	7.3	0.0	0.01	0.0	1.8	0.06	3.1	0.0	0.0	2.3	0.01	0.0	4.3	0.0	0.0	0.0
3 5 79	0.1	0.00			6.4	0.0	0.02	0.1	1.5		3.0	0.0		1.7	0.01	0.0	4.3		0.0	0.0
4 10 79	0.1	0.01	0.0	0.00	6.0	0.0	0.00	0.1	1.6	0.05	2.8	0.0	0.0	1.9	0.01	0.0	4.3	0.0	0.0	0.0
5 24 79	0.1	0.00			11	0.0	0.01	0.1	2.2		5.1	0.0		2.8	0.01	0.0	4.8		0.0	0.0
6 27 79	0.1	0.01			9.3	0.0	0.00	0.0	1.8		4.3	0.0		2.3	0.00	0.0	5.6		0.0	0.0
8 2 79	0.0	0.00	0.0	0.00	7.0	0.0	0.00	0.1	1.7	0.03	3.2	0.0	0.0	1.9	0.01	0.0	5.6	0.0	0.1	0.0

TABLE 64. WATER QUALITY FOR SITE 3162 LAWRENCE COUNTY, KENTUCKY

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	FOT P	ORTH P04
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
7	4	77	29	0.015			70	363	212	1.34	7.0		23	28	0	2.0	120	0.5					
8	8	77	20	0.06			0	419	258	1.28	7.0		26	32	0	1.8	160	0.1					
10	5	77	20	0.1	9		4	343	228	1.35	6.5		16	20	0	1.3	140	0.3					
11	16	77	8	0.05	9		4	339	225	1.19	6.8		16	20	0	1.7	140	0.4					
12	23	77	5	0.05			10	320	224	1.17	6.7		16	20	0	1.6	140	0.5					
2	2	78	5	0.06			35	310	178	1.32	7.2		15	18	0	1.3	110	1.0					
3	3	78	2	0.25			50	329	204	1.13	6.6		7	9	0	1.5	130	1.1					
4	4	78	17	0.1	24		0	342	202	1.20	6.1		11	13	0	1.8	130	1.0					
4	28	78	15	0.04	52*		20	332	209	1.11	6.8		5	6	0	1.4	140	1.3					
5	23	78	15	0.1	26*		6	330	202	1.22	7.2		17	21	0	2.0	120	0.5					
6	23	78	18	0.015			30	330	210	1.35	7.2		34	41	0	1.8	120	0.1					
7	21	78	27	0.015			8	348	229	1.40	7.5		20	25	0	1.9	130	0.1					
8	24	78	23	0.004			15	374	243	1.50	7.7		38	46	0	1.4	130	0.1					
10	12	78	16	0.02				384	275		7.8		39	48	0		160	0.1					
11	21	78	14	0.04	8		1	416	237	1.56	7.8	-32	45	55	0	1.2	120	0.1					
1	31	79	3	0.1	22		4	313	195	1.20	6.8	-7	13	16	0	1.2	120	0.7					
3	5	79	11	0.1	6		5	308	211	1.29	6.8		7	9	0	1.0	130	0.9					
4	10	79	11	0.08	19	0.00	10	319	245	1.29	7.0		63	77	0	1.1	130	0.8					
5	24	79	16	0.02	42		35	326	188	0.96	7.2	1	9	11	0	1.3	130	0.3					
6	27	79	17	0.006	17		8	297	207	1.21	7.5	-8	19	23	0	1.6	130	0.3	0.3	0.08	1.05	0.05	0.00
8	2	79	22	0.04	30	0.30	65	259	144	0.89	7.1	-4	7	9	0	1.2	96	0.4	0.0	0.01	0.45	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN	
MO	DA	YR	MILLIGRAMS PER LITER																			
7	4	77	0.0	0.02		30	0.0	0.00	0.0	4.1		21	0.6		5.3	0.01	0.0	3.6		0.0	0.0	
8	8	77	0.0	0.02		34	0.0	0.00	0.2	4.9		27	2.0		5.4	0.01	0.0	4.2		0.0	0.1	
10	5	77	0.1	0.00	0.0	0.00	35	0.0	0.01	0.1	6.2	0.10	22	2.8	0.0	3.8	0.06	0.1	3.2	0.2	0.3	0.0
11	16	77	0.1	0.00		30	0.0	0.01	0.2	5.9		22	2.8		4.0	0.04	0.0	1.8		0.1	0.0	
12	23	77	0.1	0.01		28	0.0	0.00	0.2	4.4		23	3.8		3.2	0.05	0.0	2.8		0.0	0.0	
2	2	78	0.1	0.00	0.0	0.00	20	0.0	0.00	0.2	3.7	0.05	21	3.0	0.0	3.1	0.05	0.0	2.8	0.0	0.0	0.0
3	3	78	0.0	0.01		24	0.0	0.00	0.2	3.4		21	3.2		3.2	0.02	0.0	2.8		0.0	0.0	
4	4	78	0.1	0.00	0.1	0.00	24	0.1	0.01	0.1	4.2	0.10	22	3.8	0.0	3.9	0.05	0.0	1.8	0.2	0.0	0.0
4	28	78	0.1	0.02		22	0.0	0.00	0.1	4.2		24	2.2		3.5	0.03	0.0	2.5		0.1	0.0	
5	23	78	0.1	0.02		23	0.0	0.00	0.1	4.6		21	3.2		5.0	0.02	0.1	2.6		0.2	0.0	
6	23	78	0.1	0.03		26	0.1	0.00	0.3	4.3		23	4.6		4.0	0.05	0.1	3.0		0.2	0.0	
7	21	78	0.1	0.02	0.1	0.00	38	0.0	0.01	0.1	4.9	0.10	21	3.8	0.0	4.6	0.02	0.1	3.4	0.2	0.0	0.0
8	24	78	0.1	0.02		39	0.0	0.01	0.3	5.7		22	5.3		5.8	0.04	0.1	4.0		0.1	0.0	
10	12	78	0.1	0.00	0.1	0.00	40	0.0	0.00	0.1	4.7	0.15	26	4.0	0.0	4.3	0.02	0.1	3.3	0.2	0.1	0.0
11	21	78	0.1	0.01		41	0.0	0.01	0.1	4.2		21	4.3		4.9	0.03	0.0	3.4		0.0	0.0	
1	31	79	0.1	0.00	0.0	0.00	30	0.0	0.01	0.4	3.3	0.25	17	2.2	0.0	2.8	0.05	0.1	2.6	0.2	0.0	0.0
3	5	79	0.0	0.01		32	0.0	0.00	0.1	3.7		23	1.4		2.8	0.06	0.0	2.7		0.0	0.0	
4	10	79	0.0	0.00		33	0.0	0.00	0.1	3.6		22	1.5		2.8	0.04	0.0	2.2		0.0	0.0	
5	24	79	0.0	0.00		18	0.0	0.00	0.1	3.1		19	1.4		2.5	0.06	0.2	1.7		0.4	0.0	
6	27	79	0.1	0.01		30	0.0	0.01	0.1	3.8		19	2.3		3.1	0.01	0.0	2.4		0.0	0.2	
8	2	79	0.1	0.00	0.0	0.00	16	0.1	0.1	4.3	0.35	10	1.1	0.0	2.2	0.03	0.0	2.6	0.1	0.0	0.0	

TABLE 65. WATER QUALITY FOR SITE 3163 LAWRENCE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER												
8 8 77	19	0.015			10	291	150	4.70	7.7		94	114	0	1.3	31	0.1				
10 5 77	14	0.025	6		8	233	118	3.52	6.9		56	68	0	1.0	32	0.1				
11 16 77	11	0.05	2		7	225	119	2.70	7.5		54	66	0	1.7	39	0.1				
12 23 77	3	0.04			0	240	138	1.79	7.3		36	44	0	1.4	66	0.1				
2 2 78	2	0.15			20	168	95	1.53	7.6		24	29	0	1.1	46	0.1				
3 3 78	2	0.7			4	137	77	1.60	6.4		11	13	0	1.6	38	0.2				
4 4 78	13	0.06	5		0	148	82	1.60	6.4		21	26	0	1.2	39	0.1				
4 28 78	12	0.1	54*		35	107	65	1.52	7.3		14	17	0	0.9	31	0.1				
5 23 78	14	0.2	31*		7	149	95	1.60	7.8		30	36	0	0.9	43	0.1				
6 23 78	18	0.015	56*		8	174	96	2.44	8.0		40	48	0	1.2	34	0.1				
7 21 78	24	0.01	76*		15	182	108	3.10	8.0		61	74	0	1.2	29	0.1				
8 24 78	23	0.0009	18*		8	187	141	2.43	8.0		71	86	0	0.9	46	0.1				
10 12 78	16	0.01	30*		8	210	112		8.2		77	92	1		22	0.1				
11 21 78	11	0.03	4		3	197	103	3.67	8.1		68	82	1	1.5	23	0.1				

* Suspend J Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 8 77	0.0	0.01			22	0.0	0.00	0.3	3.9		20	0.2		6.3	0.10	0.0	3.5		0.0	0.1
10 5 77	0.0	0.00	0.0	0.00	20	0.0	0.01	0.3	4.7	0.06	12	0.7	0.0	5.0	0.04	0.1	3.7	0.1	0.2	0.0
11 16 77	0.1	0.00			18	0.0	0.01	0.2	3.2		12	0.2		5.4	0.01	0.0	2.9		0.0	0.0
12 23 77	0.0	0.01			16	0.0	0.00	0.1	2.4		18	0.3		3.7	0.02	0.0	3.6		0.1	0.0
2 2 78	0.1	0.00	0.1	0.00	10	0.0	0.00	0.2	2.2	0.15	9.7	0.2	0.0	2.9	0.02	0.0	3.5	0.2	0.0	0.0
3 3 78	0.0	0.01			9.2	0.0	0.00	0.2	1.9		8.1	0.2		3.1	0.00	0.0	3.7		0.0	0.0
4 4 78	0.1	0.00	0.0	0.00	9.3	0.0	0.01	0.1	2.7	0.03	8.1	0.1	0.0	3.1	0.02	0.0	2.3	0.0	0.0	0.0
4 28 78	0.1	0.00			6.3	0.0	0.00	0.1	2.2		6.5	0.0		2.3	0.00	0.0	3.2		0.1	0.0
5 23 78	0.1	0.02			10	0.1	0.00	0.2	2.4		9.5	0.2		2.9	0.01	0.1	2.9		0.3	0.0
6 23 78	0.0	0.02			13	0.0	0.00	0.1	2.4		11	0.2		3.6	0.01	0.0	2.8		0.1	0.0
7 21 78	0.0	0.02	0.0	0.00	15	0.0	0.01	0.1	3.0	0.06	11	0.1	0.0	3.8	0.02	0.0	3.6	0.1	0.0	0.0
8 24 78	0.1	0.02			18	0.0	0.01	0.2	3.8		14	0.3		4.8	0.03	0.1	4.2		0.1	0.0
10 12 78	0.0	0.01	0.0	0.00	16	0.0	0.01	0.3	3.0	0.08	12	0.2	0.0	3.6	0.02	0.1	3.0	0.1	0.1	0.0
11 21 78	0.1	0.00			15	0.0	0.01	0.3	2.3		10	0.4		3.2	0.01	0.0	3.0		0.1	0.0

TABLE 66. WATER QUALITY FOR SITE 3164 LAWRENCE COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UN/CM	MG/L	----- MILLIGRAMS PER LITER -----												
7	4	77	21	0.0003			50	176	95	3.53	7.5		49	60	0	4.7	20	0.1				
8	8	77	21	0.003			10	170	86	3.29	7.7		39	47	0	2.1	22	0.1				
10	5	77	13	0.04	18		15	151	84	2.55	7.4		26	32	0	2.0	26	0.1				
11	16	77	9	0.1	8		4	129	75	2.14	7.7		20	25	0	2.5	27	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
7	4	77	0.0	0.01		15	0.0	0.00	0.1	3.3	6.9	0.4		4.9	0.00	0.1	4.3		0.0	0.0
8	8	77	0.0	0.01		14	0.0	0.00	0.2	3.9	6.4	0.3		5.2	0.01	0.0	4.1		0.0	0.0
10	5	77	0.0	0.00	0.1	0.00	14	0.0	0.01	0.4	4.7	0.04	5.5	0.5	0.0	4.7	0.03	0.0	4.4	0.1
11	16	77	0.0	0.00		12	0.0	0.00	0.2	2.5	5.5	0.2		4.1	0.01	0.0	3.5		0.0	0.0

TABLE 67. WATER QUALITY FOR SITE 3165 LAWRENCE COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4				
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UN/CM	MG/L	----- MILLIGRAMS PER LITER -----																
1	31	79	2	0.15	42		100	105	61	2.28	6.3		16	19	0	0.1	23	0.1							
3	5	79	10	0.09	120		260	98	62	1.51	7.0	-8	13	16	0	0.9	29	0.2							
4	10	79	9	0.15	151	0.00	450	105	65	1.54	7.2		15	18	0	0.8	30	0.1							
5	24	79	16	0.03	38		120	138	85	2.12	7.0	-25	39	47	0	1.0	30	0.0							
6	27	79	18	0.03	411	0.01	1900	119	73	2.13	7.6	-21	25	30	0	1.3	27	0.0	0.0	0.01	0.85	0.20	0.00		
8	2	79	23	0.15		0.05	2000	103	60	1.56	7.5	0	16	20	0	2.1	24	0.1		1.05	0.60				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
1	31	79	0.1	0.00	0.0	0.00	8.9	0.0	0.01	0.2	2.4	0.08	5.8	0.2	0.0	3.1	0.02	0.0	3.3	0.0
3	5	79	0.1	0.00		7.4	0.0	0.00	0.2	2.0	5.3	0.2		2.0	0.01	0.0	3.0		0.0	0.0
4	10	79	0.1	0.01	0.0	0.01	7.4	0.0	0.00	0.1	2.3	0.30	5.8	0.2	0.0	2.1	0.01	0.0	3.0	0.1
5	24	79	0.1	0.01		12	0.0	0.01	0.2	2.3	7.4	0.4		2.4	0.00	0.0	3.1		0.0	0.0
6	27	79	0.1	0.02		9.8	0.0	0.00	0.1	2.5	7.2	0.2		2.3	0.00	0.0	3.3		0.0	0.0
8	2	79	0.1	0.02		5.8	0.0	0.00	0.0	3.0	4.9	0.0		1.7	0.00	0.0	3.9		0.0	0.1

TABLE 68. WATER QUALITY FOR SITE 3166 LAWRENCE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT SOLID	LAB RATIO	ACID- PH	ALKA- LITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L													
7 4 77	19	0.001			4	196	97	2.53	7.2		42	51	0	0.8	32	0.0				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
7 4 77	0.0	0.02			13	0.0	0.00	0.0	2.6		10	0.1		4.0	0.00	0.0	3.9		0.0	0.0

TABLE 69. WATER QUALITY FOR SITE 3167 LAWRENCE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT SOLID	LAB RATIO	ACID- PH	ALKA- LITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L													
12 23 77	2	0.06			20	120	74	1.61	6.8		14	17	0	1.2	34	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
12 23 77	0.0	0.00			8.2	0.0	0.00	0.1	1.6		6.6	0.0		4.3	0.01	0.0	4.1		0.1	0.0

TABLE 70. WATER QUALITY FOR SITE 3181 LESLIE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
7 22 77	24	0.09			600	50	31	2.73	5.9			8	10	0	2.1	8	0.2				
8 24 77	20	0.1			20	59	31	3.80	7.5			11	14	0	1.1	6	0.2				
10 4 77	14	0.03	9		0	50	34	2.03	6.7			10	12	0	2.2	10	0.1				
11 1 77	13	0.06	25		2	48	39	2.45	6.7			10	12	0	1.7	12	0.0				
12 23 77	4	0.4			4	29	28	1.61	7.1			6	7	0	0.9	9	0.0				
2 3 78	1	1.0			0	39	26	1.87	6.4			4	5	0	1.0	9	0.0				
4 10 78	12	0.3			4	47	30	1.32	7.1			5	6	0	3.7	9	0.1				
5 11 78	23	0.3	37*		10	34	29	1.17	6.8			5	6	0	1.0	12	0.1				
6 12 78	18	0.015				49	34	2.35	6.7			9	11	0	2.3	9	0.2				
7 10 78	21	0.02	36*		0	57	42	2.47	7.3			12	15	0	3.8	10	0.2				
8 10 78	20	0.05	15		5	68	49	3.27	7.1			13	16	0	3.7	10	0.2				
10 2 78	16	0.0001	19*		3	180	94	2.37	6.9			20	24	0	29	14	0.2				
11 2 78	9	0.0001	16		6	169	91	2.52	7.5	-16		19	23	0	27	15	0.0				
12 8 78	12	0.02	11		8	45	29	1.74	6.8			7	8	0	1.1	10	0.0				
2 15 79	4	3	43		35	32	23	1.58	6.4	1		2	3	0	0.5	10	0.1				
3 16 79	7	1.5	5		2	32	27	1.68	6.5	1		6	7	0	1.0	9	0.0				
4 12 79	14	0.03	11		15	32	26	1.19	6.3			2	2	0	0.8	11	0.0				
5 15 79	12	0.008	15	0.00	5	39	33	1.25	6.8	4		3	4	0	1.1	12	0.7				
6 4 79	15	0.06	15		20	39	28	1.36	6.0	2		4	5	0	1.2	10	0.1				
7 5 79	18	0.01	6		8										1.8	12		0.0	0.01	1.05	0.00
7 31 79	19	0.02	13		20	49	32	2.23	7.0	-5		8	10	0	0.9	9	0.1	0.0	0.02	0.90	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 22 77	0.2	0.00			2.7	0.0	0.01	0.3	2.3		2.0	0.0		3.8	0.00	0.0	1.9		0.0	0.0
8 24 77	0.0	0.01			3.1	0.0	0.00	0.1	1.6		2.6	0.0		2.5	0.01	0.0	3.1		0.0	0.0
10 4 77	0.0	0.02	0.0	0.00	3.1	0.0	0.00	0.0	1.3	0.01	2.4	0.0	0.0	2.4	0.00	0.0	2.8	0.0	0.0	0.0
11 1 77	0.1				5.1	0.0	0.00	0.2	2.0		2.8	0.0		2.2	0.02	0.0	3.6		0.1	0.0
12 23 77	0.0	0.00	0.1	0.00	1.9	0.0	0.00	0.1	1.1	0.05	2.0	0.0	0.0	1.2	0.02	0.0	3.3	0.0	0.1	0.0
2 3 78	0.0	0.00			2.2	0.0	0.00	0.0	1.2		2.2	0.0		1.7	0.01	0.0	2.7		0.0	0.0
4 10 78	0.0	0.00	0.0	0.00	2.1	0.0	0.00	0.0	1.4	0.00	1.9	0.0	0.0	1.5	0.00	0.0	3.4	0.0	0.0	0.0
5 11 78	0.0	0.01			1.9	0.0	0.00	0.1	1.1		1.9	0.0		1.2	0.00	0.0	3.0		0.0	0.0
6 12 78	0.0	0.00	0.0	0.00	2.9	0.0	0.00	0.1	1.6	0.00	2.5	0.0	0.0	2.8	0.01	0.0	3.3	0.0	0.0	0.0
7 10 78	0.0	0.01	0.0	0.00	3.3	0.0	0.02	0.1	2.1	0.02	2.8	0.0	0.0	4.8	0.01	0.0	3.0	0.0	0.1	0.0
8 10 78	0.0	0.00			4.4	0.0	0.01	0.0	2.4		3.0	0.0		7.1	0.03	0.0	4.1		0.0	0.0
10 2 78	0.0	0.00	0.0	0.00	8.7	0.0	0.00	0.0	2.8	0.10	5.8	0.0	0.0	13	0.00	0.0	3.4	0.1	0.0	0.0
11 2 78	0.0	0.00			7.0	0.0	0.00	0.0	2.2		4.6	0.0		17	0.00	0.0	3.1		0.0	0.0
12 8 78	0.1	0.00			2.7	0.0	0.01	0.1	1.3		1.8	0.0		2.2	0.02	0.0	2.6		0.0	0.0
2 15 79	0.0	0.00			2.3	0.0	0.00	0.0	0.9		2.1	0.0		0.6	0.01	0.0	2.4		0.0	0.0
3 16 79	0.1	0.00			2.1	0.0	0.01	0.1	1.2		2.0	0.0		1.4	0.02	0.0	2.7		0.0	0.0
4 12 79	0.1	0.00	0.3	0.00	1.9	0.1	0.02	0.1	1.2	0.07	1.5	0.0	0.0	0.9	0.03	0.1	3.1	0.0	0.0	0.0
5 15 79	0.1	0.00			2.7	0.0	0.01	0.1	1.2		2.2	0.0		1.5	0.01	0.0	3.0		0.0	0.1
6 4 79	0.2	0.01			2.1	0.0	0.03	0.1	1.3		2.0	0.0		0.7	0.00	0.0	3.2		0.0	0.0
7 5 79	0.0	0.00	0.0	0.00	3.7	0.0	0.01	0.0	1.5	0.08	2.5	0.0	0.0	2.3	0.00	0.0	3.2	0.0	0.0	0.0
7 31 79	0.0	0.00	0.0	0.00	3.2	0.0	0.00	0.0	1.2	0.20	2.5	0.0	0.2	1.6	0.00	0.0	3.2	0.1	0.0	0.0

TABLE 71. WATER QUALITY FOR SITE 3182 LESLIE COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
7	22	77	26	0.02			130	196	98	1.34	6.6		19	23	0	1.3	51	0.2					
8	24	77	20	0.08			350	147	78	1.59	7.1		16	19	0	0.9	36	0.3					
10	4	77	18	0.15	105		140	178	90	1.37	6.5		11	14	0	1.5	48	0.4					
11	1	77	14	0.06	37		30	172	95	1.50	6.9		16	20	0	1.4	49	0.2					
11	29	77	7	10	3280		220	84	52	1.46	7.0		16	19	0	1.9	22	0.2					
12	23	77	4	0.15			2	154	69	1.41	6.9		7	8	0	0.6	37	0.2					
2	3	78					20	112	64	1.61	6.8		10	12	0	1.0	30	0.5					
3	9	78	8	2.5	1750		3400	90	60	6.2	4	2	2	0		26	0.1						
4	10	78	15	0.15			45	106	61	1.49	7.4		11	14	0	2.1	29	0.2					
5	11	78	25	0.4	72*		65	98	59	1.29	7.2		12	15	0	2.0	28	0.3					
6	13	78	16	0.03			140	78	78	1.82	7.0		16	20	0	2.2	32	0.6					
7	10	78	25	0.03	38*		120	156	91	1.58	7.5		20	24	0	1.9	43	0.3					
8	10	78	22	0.05	44*		140	182	115	1.64	7.4		22	27	0	1.2	55	0.5					
10	2	78	20	0.005	34*		35	256	155	1.34	7.6		40	49	0	4.3	76	0.5					
11	2	78	10	0.0004	12		15	326	189	1.55	7.9	-42	45	54	0	14	76	1.9					
12	8	78	13	0.03	198		310	129	68	1.31	7.4		9	11	0	1.5	36	0.3					
2	15	79	4	2.5			1400	83	56	1.08	6.4	1	3	4	0	0.7	33	0.2					
3	16	79	1	0.005	51		15	107	61	1.47	7.1	-5	10	12	0	1.4	30	0.2					
4	12	79	14	0.03	190	0.25	700	92	50	1.54	6.5		4	5	0	0.9	24	0.4					
5	15	79	11	0.006	18	0.00	20	116	72	1.41	7.2	-5	8	10	0	0.9	38	0.5					
6	4	79	17	0.07	146	0.55	300	73	53	1.34	6.9	0	9	11	0	0.6	26	0.2					
7	5	79	20	0.01	112	0.01	310	114	73	1.40	7.4		11	14	0	1.1	38	0.1	0.0	0.02	1.10	0.10	0.00
7	31	79	21	0.15	64		140	126	67	1.64	7.4	-8	15	18	0	0.7	31	0.2	0.1	0.03	0.45	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
7 22 77	0.0	0.00			12	0.0	0.00	0.1	3.5		7.5	0.3		3.6	0.01	0.0	2.8		0.0	0.0
8 24 77	0.3	0.01			10	0.0	0.00	0.4	3.0		6.8	0.3		2.5	0.02	0.0	2.9		0.0	0.0
10 4 77	0.0	0.03	0.0	0.00	13	0.0	0.00	0.0	2.5	0.04	7.6	0.4	0.0	2.5	0.00	0.0	2.8	0.1	0.0	0.0
11 1 77	0.1				14	0.0	0.00	0.0	2.5		8.3	0.3		2.7	0.01	0.0	2.2		0.0	0.0
11 29 77	0.2	0.00			4.9	0.0	0.02	0.1	2.2		4.2	0.2		2.0	0.01	0.0	1.9		0.0	0.0
12 23 77	0.1	0.00	0.0	0.00	8.7	0.0	0.00	0.1	1.8	0.10	6.7	0.4	0.0	1.8	0.02	0.0	3.3	0.1	0.1	0.0
2 3 78	0.1	0.00			8.1	0.0	0.01	0.1	2.2		6.1	0.2		2.4	0.02	0.0	2.4		0.1	0.0
3 9 78	0.1	0.00			12	0.0	0.00	0.1	1.6		3.8	0.0		1.5	0.01	0.0	6.5		0.0	0.0
4 10 78	0.1	0.00	0.0	0.00	7.1	0.0	0.00	0.1	2.0	0.00	5.6	0.1	0.0	2.2	0.00	0.0	2.6	0.0	0.0	0.0
5 11 78	0.0	0.01			6.2	0.0	0.00	0.1	1.9		4.7	0.2		1.7	0.00	0.0	2.8		0.0	0.0
6 13 78	0.0	0.00	0.0	0.00	9.8	0.0	0.00	0.1	3.1	0.00	7.1	0.1	0.0	4.1	0.01	0.0	3.0	0.1	0.0	0.0
7 10 78	0.1	0.01	0.0	0.00	12	0.0	0.01	0.1	3.3	0.06	8.1	0.1	0.0	3.4	0.02	0.0	2.8	0.1	0.1	0.0
8 10 78	0.1	0.00			16	0.0	0.02	0.1	4.0		10	0.3		4.4	0.03	0.0	3.8		0.0	0.0
10 2 78	0.1	0.01	0.0	0.00	20	0.0	0.00	0.1	3.9	0.15	11	0.2	0.0	6.5	0.01	0.0	2.9	0.1	0.0	0.0
11 2 78	0.1	0.01			21	0.0	0.01	0.1	4.9		11	0.1		21	0.01	0.0	3.0		0.0	0.0
12 8 78	0.2	0.00			9.1	0.0	0.01	0.3	1.8		5.5	0.2		1.9	0.01	0.0	2.5		0.0	0.0
2 15 79	0.1	0.01			6.8	0.0	0.00	0.0	1.5		4.4	0.2		0.9	0.02	0.1	2.1		0.2	0.0
3 16 79	0.1	0.00			7.9	0.0	0.01	0.0	1.8		5.2	0.3		2.3	0.01	0.0	2.3		0.0	0.0
4 12 79	0.1	0.01	0.0	0.00	6.6	0.0	0.01	0.1	1.8	0.03	4.7	0.3	0.1	1.3	0.02	0.0	2.6	0.0	0.0	0.2
5 15 79	0.1	0.00			9.9	0.0	0.00	0.1	2.1		6.4	0.0		2.0	0.01	0.0	2.7		0.0	0.0
6 4 79	0.0	0.01			6.0	0.0	0.00	0.2	2.0		4.2	0.1		1.3	0.00	0.0	3.1		0.0	0.0
7 5 79	0.1	0.01	0.0	0.00	10	0.0	0.01	0.2	2.5	0.15	6.2	0.1	0.0	1.6	0.00	0.0	2.5	0.1	0.0	0.0
7 31 79	0.1	0.00			9.0	0.0	0.00	0.1	2.2		6.1	0.1		1.6	0.03	0.1	3.0		0.1	0.0

TABLE 72. WATER QUALITY FOR SITE 3183 LESLIE COUNTY, KENTUCKY

DATE	WATER EST		SUSP SETT		SPEC	DIS	NEUT	LAB ACID-		ALKA-	NO3		NH3	TOT	TOT	ORTH
	TEMP	DISCH	SOL	MATTER				PH	ITY		MC03	C03				
MO DA YR	DEG C	CFS	MG/L	ML/L	TURB	COND	SOLID	RATIO								
										MILLIGRAMS PER LITER						
NO DA YR	DEG C				JTU	UM/CM	MG/L									
10 4 77	17	0.004	4		10	293	161	1.89	7.0		49	60	0	0.9	70	0.1
11 1 77	16	0.004	23		0	340	207	2.04	7.6		57	69	0	1.2	93	0.1
11 29 77	5	0.25	25		20	182	115	1.38	7.4		14	17	0	1.3	62	0.1
12 23 77	6	0.01			0	250	161	1.40	7.4		34	41	0	1.1	84	0.1
2 3 78	3	0.6			60	197	129	1.69	7.5		25	31	0	6.2	57	0.1
3 9 78	6	1.5	272		220	95	69	1.14	6.9		9	11	0	3.1	34	0.4
4 10 78	20	0.5			4	163	99	1.99	7.8		36	44	0	4.0	35	0.1
5 12 78	22	0.5	15		10	118	73	1.73	7.4		21	26	0	1.8	29	0.1
6 12 78	23	0.1			0	239	132	2.39	7.0		63	77	0	4.2	42	0.1
7 10 78	21	0.007				275	168	1.69	7.9		64	77	0	1.6	70	0.2
8 10 78	25	0.002				297	204	1.86	7.9		64	77	0	0.5	86	0.2
10 2 78	15	0.0001	11		7	341	200	1.64	8.4		89	105	2	0.9	83	0.1
11 2 78	19	0.0000	1		7	377	233	1.96	8.2	-90	97	116	1	0.9	93	0.0
12 8 78	12	0.004	2		10	217	122	1.46	7.3		20	24	0	0.7	64	0.0
1 19 79	3	0.01	15		4	244	141	1.43	7.3		29	35	0	1.2	74	0.1
3 16 79	5	0.01	10		2	247	135	1.50	7.2		29	35	0	1.5	68	0.1
4 12 79	15	0.005	21	0.00	45	227	132	1.36	7.4	-19	22	27	0	0.9	71	0.0
5 16 79	15	0.0000	20		9	267	148	1.64	7.7	-36	36	44	0	1.7	70	0.3
6 6 79	17	0.002	64		15	252	143	1.51	7.7	-35	27	33	0	0.6	74	0.0
7 9 79	17	0.0006	58*		140	289	173	1.84	8.0	-49	52	62	0	0.8	75	0.1 0.1 0.07 0.30 0.20 0.01
7 31 79	26	0.003	3		45	293	166	1.89	8.0	-34	48	57	0	0.6	73	0.1 0.0 0.01 0.60 0.00 0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 4 77	0.1	0.02	0.0	0.00	27	0.0	0.00	0.2	2.5	0.10	11	0.2	0.0	10	0.00	0.0	4.0	0.4	0.0	0.0
11 1 77	0.1				36	0.0	0.00	0.3	3.0		19	0.5		12	0.00	0.0	3.5		0.0	0.0
11 29 77	0.1	0.00			18	0.0	0.00	0.1	2.0		7.8	0.3		5.3	0.01	0.0	4.4		0.0	0.0
12 23 77	0.1	0.01	0.1	0.00	23	0.0	0.00	0.4	2.1	0.20	12	0.2	0.0	8.0	0.03	0.0	4.3	0.4	0.1	0.0
2 3 78	0.1	0.00			17	0.0	0.01	0.6	2.3		8.3	0.2		14	0.02	0.0	3.7		0.0	0.0
3 9 78	0.3	0.01			6.9	0.0	0.02	0.6	1.8		4.1	0.1		4.3	0.02	0.0	3.2		0.0	0.0
4 10 78	0.0	0.00	0.0	0.00	13	0.0	0.00	0.3	1.8	0.03	6.8	0.2	0.0	7.3	0.00	0.0	3.7	0.2	0.0	0.0
5 12 78	0.0	0.00			9.5	0.0	0.00	0.2	1.5		4.8	0.1		4.6	0.00	0.0	3.7		0.0	0.0
6 12 78	0.0	0.00			18	0.0	0.00	0.4	2.4		8.4	0.1		13	0.00	0.0	3.0		0.0	0.0
7 10 78	0.1	0.01	0.0	0.00	22	0.0	0.00	1.1	2.8	0.10	11	0.9	0.0	8.9	0.02	0.0	4.3	0.3	0.1	0.0
8 10 78	0.1	0.00			35	0.0	0.01	0.7	3.7		10	1.0		16	0.03	0.0	5.4		0.0	0.0
10 2 78	0.1	0.02	0.0	0.00	28	0.0	0.01	0.2	3.2	0.30	13	0.2	0.0	7.3	0.04	0.2	4.2	0.5	0.2	0.0
11 2 78	0.1	0.01			38	0.1	0.02	0.3	3.6		16	0.4		12	0.04	0.1	4.5		0.1	0.0
12 8 78	0.1	0.00			19	0.0	0.01	0.1	2.3		8.2	0.0		6.2	0.01	0.0	4.1		0.1	0.0
1 19 79	0.1	0.00	0.1	0.00	22	0.0	0.01	0.2	2.0	0.15	10	0.1	0.0	5.8	0.02	0.1	3.5	0.1	0.1	0.2
3 16 79	0.1	0.00			21	0.0	0.02	0.2	2.3		9.0	0.1		7.7	0.01	0.0	3.6		0.0	0.0
4 12 79	0.1	0.00	0.3	0.00	20	0.0	0.01	0.1	2.2	0.15	9.0	0.1	0.0	5.3	0.02	0.0	4.0	0.3	0.0	0.1
5 16 79	0.1	0.01			24	0.0	0.01	0.4	2.5		11	0.2		7.5	0.01	0.0	3.5		0.1	0.0
6 6 79	0.1	0.01			23	0.0	0.01	0.2	2.6		9.8	0.1		7.3	0.01	0.0	4.0		0.0	0.0
7 9 79	0.2	0.01	0.0	0.00	31	0.0	0.01	1.0	2.7	0.15	12	0.6	0.0	8.4	0.02	0.0	4.3	0.3	0.0	0.0
7 31 79	0.1	0.01			32	0.0	0.02	0.3	2.6		11	0.2		8.0	0.01	0.0	4.0		0.0	0.0

TABLE 73. WATER QUALITY FOR SITE 3190 LETCHER COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
1 24 78	5 4		471		160	132	76	1.52	7.0			12	15	0	1.2	38	0.4				
3 7 78	6 0.3		2490		3000	206	120	1.39	7.1			22	27	0	1.5	63	0.3				
4 18 78	12 0.2		37		20	239	144	1.31	7.5			29	35	0	1.8	77	0.3				
5 16 78	19 0.3		157*		100	153	91	1.47	7.5			23	28	0	1.1	44	0.3				
6 14 78	29 0.02					244	145	1.47	7.4			38	46	0	1.2	72	0.3				
7 12 78	25 0.01		115*		45	275	161	1.53	7.8			48	59	0	1.8	77	0.2				
8 15 78	27 0.05		33*		10	86	48	1.76	7.1			10	12	0	0.3	20	0.0				
9 29 78	17 0.0003		18*		15	93	59	1.33	6.8			16	19	0	0.7	27	0.1				
11 7 78	11 0.0003		11		2	96	60	1.56	7.3	-14		16	20	0	0.8	27	0.0				
12 11 78	5 0.06		3		10	71	50	1.35	7.2			6	7	0	0.7	25	0.0				
1 23 79	4 0.2		5		6	71	46	1.22	6.6			2	3	0	1.4	24	0.1				
3 15 79	7 0.04		44		4	81	52	1.22	6.7	0		4	5	0	0.9	28	0.0				
4 11 79	15 0.1		10	0.00	15	78	52	1.20	6.7	-1		5	6	0	1.0	28	0.0				
5 15 79	15 0.02		10		2	86	55	1.22	6.9	2		4	5	0	0.6	30	0.1				
6 5 79	18 0.05		12		20	73	55	1.38	6.8	-18		16	20	0	0.7	22	0.1				
7 6 79	20 0.02		6		10	89	58	1.56	7.2	-4		10	12	0	0.7	27	0.1 0.0	0.01	10.0	0.05	0.00
7 30 79	19 0.04		7		45	92	51	1.79	7.2	-7		11	14	0	0.5	21	0.0 0.0	0.08	0.55	0.00	
11 1 79	17 0.003		16		45	244	134	2.15	7.8	-42		55	67	0	2.2	51	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
1 24 78	0.3	0.00	0.0	0.00	9.7	0.0	0.00	0.4	2.1	0.00	7.4	0.0	0.0	2.4	0.01	0.0	2.4	0.1	0.0	0.1
3 7 78	0.5	0.03			16	0.1	0.01	0.6	3.2		11	0.3		3.2	0.02	0.1	3.1		0.2	0.0
4 18 78	0.2	0.00	0.0	0.00	18	0.0	0.00	0.4	3.9	0.07	12	0.2	0.0	4.6	0.01	0.0	3.3	0.1	0.0	0.0
5 16 78	0.0	0.00			11	0.0	0.00	0.1	2.8		7.7	0.2		2.7	0.00	0.0	3.2		0.0	0.0
6 14 78	0.0	0.00	0.0	0.00	19	0.0	0.00	0.1	3.6	0.00	12	0.2	0.0	4.8	0.01	0.0	3.4	0.2	0.1	0.0
7 12 78	0.1	0.01			22	0.0	0.01	0.1	4.5		12	0.2		7.2	0.02	0.0	2.6		0.1	0.0
8 15 78	0.0	0.01			5.7	0.0	0.00	0.1	2.1		3.9	0.0		2.0	0.01	0.0	3.6		0.1	0.0
9 29 78	0.0	0.02			5.9	0.0	0.01	0.1	2.0		4.0	0.0		2.3	0.03	0.1	3.2		0.2	0.0
11 7 78	0.0	0.01			6.4	0.0	0.00	0.0	2.0		4.0	0.0		4.4	0.01	0.0	2.6		0.0	0.0
12 11 78	0.1	0.00			5.4	0.0	0.01	0.1	1.7		4.0	0.0		2.1	0.01	0.0	3.2		0.0	0.0
1 23 79	0.1	0.00			5.5	0.0	0.00	0.2	1.5		3.6	0.0		1.2	0.01	0.1	3.0		0.1	0.2
3 15 79	0.0	0.00			5.6	0.0	0.01	0.1	1.7		4.2	0.0		1.6	0.02	0.0	3.2		0.1	0.0
4 11 79	0.1	0.00	0.1	0.00	5.8	0.0	0.00	0.1	1.7	0.03	4.1	0.0	0.0	1.6	0.01	0.0	3.0	0.0	0.0	0.2
5 15 79	0.0	0.00			6.6	0.0	0.00	0.0	1.7		4.1	0.0		1.5	0.01	0.0	3.2		0.0	0.7
6 5 79	0.2	0.01			5.3	0.0	0.00	0.1	1.8		3.6	0.0		1.5	0.02	0.0	4.1		0.0	0.0
7 6 79	0.0	0.01	0.0	0.00	7.6	0.0	0.00	0.1	2.0	0.10	4.7	0.0	0.0	1.8	0.00	0.0	3.3	0.1	0.0	0.0
7 30 79	0.0	0.01			6.7	0.0	0.00	0.0	2.0		4.2	0.0		1.7	0.01	0.0	3.5		0.0	0.0
11 1 79	0.3	0.01			22	0.0	0.01	0.0	3.9		11	0.1		5.6	0.01	0.1	2.4		0.0	0.0

TABLE 74. WATER QUALITY FOR SITE 3191 LETCHER COUNTY, KENTUCKY

TABLE 7-1 WATER ANALYSIS																							
DATE		WATER TEMP		EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SD4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	TOT ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
6	29	77	20	0.015			15	75	43	3.22	7.1			19	23	0	1.0	9	0.2				
7	26	77	24	0.05			110	73	39	2.69	7.2			17	21	0	0.7	10	0.1				
8	23	77	20	0.025			25	76	49	2.70	7.1			19	23	0	0.6	12	0.3				
9	27	77	18	0.04			30	95	55	3.97	7.2			30	36	0	0.8	10	0.5				
10	26	77	13	0.03			15	95	51	2.87	7.1			22	27	0	1.8	13	0.0				
11	29	77	6	4	41		20	46	36	1.60	7.0			7	8	0	1.5	14	0.1				
12	20	77	8	0.15			0	50	37	1.55	7.3			8	10	0	0.9	15	0.1				
1	24	78	4	0.4	193		170	63	38	2.03	6.7			7	9	0	0.8	13	0.4				
3	7	78	5	1.5	12		30	53	33	1.75	6.5			7	8	0	0.9	12	0.1				
4	18	78	12	0.15	48		0	66	42	2.16	7.2			11	14	0	1.1	13	0.3				
5	16	78	17	0.15	28*		25	51	34	1.77	6.9			7	9	0	1.0	12	0.3				
6	14	78	15	0.05				59	40	2.20	6.9			11	14	0	0.8	12	0.3				
8	15	78	21	0.005	25*		20	63	40	2.87	7.2			14	17	0	0.3	10	0.2				
12	11	78	4	0.05	3		5	48	40	1.28	6.4			9	11	0	1.1	16	0.5				
1	23	79	3	0.15			3	43	30	1.55	6.7	2	4	5	0	1.5	11	0.1					
3	15	79	5	0.05	2		4	45	28	1.53	6.7	-1	3	4	0	1.0	11	0.0					
4	11	79	15	0.05	39	0.00	30	45	33	1.50	6.7	0	5	6	0	1.1	14	0.0					
5	15	79	16	0.02	45		15	53	41	1.22	6.9	1	4	5	0	0.6	15	1.5					
6	5	79	15	0.03	15		15	51	37	1.41	6.6	-2	8	10	0	1.2	14	0.1					
7	6	79	16	0.007	10		10	57	43	1.95	7.4	-6	11	14	0	1.1	14	0.5	0.0	0.03	1.00	0.15	0.00
7	30	79	18	0.009	14		25	62	41	2.82	7.4	-2	15	18	0	0.8	10	0.2	0.0	0.01	0.70	0.10	0.00
11	1	79	14	0.002	11		20	74	46	3.52	7.5	-19	23	28	0	0.9	9	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 29 77	0.0	0.00			4.6	0.0	0.00	0.1	1.9		3.0	0.0		2.8	0.01	0.0	3.8		0.0	0.0
7 26 77	0.1	0.00			4.1	0.0	0.01	0.0	1.8		2.9	0.0		2.2	0.00	0.0	3.2		0.0	0.0
8 23 77	0.0	0.01			5.4	0.0	0.00	0.0	2.0		3.3	0.0		3.4	0.02	0.0	4.0		0.0	0.0
9 27 77	0.0	0.01			5.8	0.0	0.00	0.0	2.3		3.5	0.0		5.8	0.03	0.0	3.4		0.0	0.0
10 26 77	0.0	0.02	0.0	0.00	6.3	0.0	0.00	0.1	2.7	0.05	3.8	0.0	0.0	3.0	0.00	0.0	3.4	0.0	0.0	0.0
11 29 77	0.1	0.00			4.0	0.0	0.00	0.1	1.4		2.6	0.0		1.5	0.00	0.0	3.1		0.0	0.0
12 20 77	0.0	0.00			3.6	0.0	0.00	0.0	1.3		2.7	0.0		1.6	0.00	0.0	3.4		0.0	0.0
1 24 78	0.1	0.00	0.0	0.00	4.3	0.0	0.00	0.2	1.4	0.00	3.2	0.0	0.0	2.1	0.00	0.0	3.0	0.0	0.0	0.0
3 7 78	0.1	0.02			3.3	0.0	0.00	0.1	1.2		2.6	0.0		1.6	0.00	0.0	3.0		0.0	0.0
4 18 78	0.1	0.00	0.0	0.00	4.7	0.0	0.00	0.1	1.8	0.01	3.4	0.0	0.0	2.1	0.01	0.0	3.4	0.0	0.0	0.0
5 16 78	0.0	0.00			3.5	0.0	0.00	0.1	1.3		2.5	0.0		1.5	0.00	0.0	3.3		0.0	0.0
6 14 78	0.0	0.00	0.0	0.00	4.2	0.0	0.00	0.0	2.0	0.00	2.9	0.0	0.0	2.3	0.00	0.0	3.7	0.0	0.0	0.0
8 15 78	0.0	0.01			5.0	0.0	0.01	0.1	1.9		2.8	0.0		2.0	0.01	0.0	3.8		0.0	0.0
12 11 78	0.1	0.00			4.0	0.0	0.00	0.1	1.6		2.2	0.0		1.4	0.00	0.0	3.0		0.0	0.0
1 23 79	0.0	0.00			3.6	0.0	0.00	0.0	1.2		1.9	0.0		1.1	0.01	0.0	2.8		0.0	0.2
3 15 79	0.0	0.00			2.8	0.0	0.00	0.1	1.0		2.1	0.0		0.8	0.02	0.1	3.1		0.0	0.0
4 11 79	0.0	0.00	0.1	0.00	3.5	0.0	0.00	0.0	1.3	0.09	2.3	0.0	0.0	1.3	0.01	0.0	3.0	0.0	0.0	0.1
5 15 79	0.0	0.00			4.0	0.0	0.00	0.0	1.4		2.5	0.0		1.4	0.01	0.0	3.2		0.0	0.0
6 5 79	0.1	0.00			3.3	0.0	0.02	0.1	1.7		2.0	0.0		1.6	0.00	0.0	3.4		0.0	0.0
7 6 79	0.0	0.01	0.0	0.00	5.2	0.0	0.00	0.0	1.6	0.09	3.0	0.0	0.0	1.6	0.00	0.0	3.5	0.0	0.0	0.0
7 30 79	0.0	0.00			4.8	0.0	0.04	0.0	2.2		3.0	0.0		1.9	0.01	0.0	3.9		0.0	0.0
11 1 79	0.1	0.02			5.4	0.1	0.04	0.0	3.2		3.3	0.0		2.3	0.07	0.0	3.0		0.1	0.1

TABLE 75. WATER QUALITY FOR SITE 3192 LETCHER COUNTY, KENTUCKY

TABLE 75. WATER QUALITY FOR SITE 3192 LETCHER COUNTY, KENTUCKY																										
DATE		WATER TEMP		EST DISCH	SUSP SOL	SETT MATTER	SPEC COND		DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NC03	CO3	CL	SO4	AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04			
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER																
6	29	77	24	0.05	95		15	297	146	2.25	8.0			77	93	1	1.3	48	0.8							
7	26	77	24	0.05			4	363	154	4.22	8.2			104	125	1	1.2	32	0.1							
8	23	77	29	0.003			4	383	138	3.57	7.7			74	89	0	1.0	36	0.1							
9	27	77	20	0.02			20	284	151	3.80	7.7			100	121	0	1.5	34	0.1							
10	26	77	13	0.08			10	209	113	2.82	7.6			53	65	0	1.2	36	0.0							
11	29	77	6	5			130	126	78	1.67	7.0			23	28	0	1.9	33	0.3							
12	20	77	9	0.2		2	181	106	1.38	7.4			24	29	0	1.4	55	0.1								
1	24	78	4	4	152		170	199	107	1.59	7.4			21	26	0	0.6	54	0.3							
3	7	78	4	0.3	17		40	162	84	1.69	7.3			18	22	0	1.3	40	0.2							
4	18	78	15	0.25	22		0	214	120	1.75	7.8			43	52	0	1.5	53	0.1							
5	16	78	18	0.04	30*		15	143	92	1.64	7.5			39	48	0	1.1	37	0.2							
6	14	78	20	0.007				300	169	3.17	8.0			101	122	1	1.5	44	0.3							
7	12	78	35	0.04	28*		8	351	207	5.04	8.5			150	176	3	1.5	39	0.1							
8	15	78	28	0.01	12		10	262	133	4.77	8.1			84	101	1	0.6	27	0.1							
12	11	78	4	0.02	3		5	156	84	1.81	7.8			30	37	0	1.2	35	0.1							
1	23	79	4	0.06	14	0.00	35	140	79	1.61	7.0			15	18	0	3.0	36	0.1							
3	15	79	5	0.015	18		6	154	89	1.76	7.4	-17		22	27	0	2.4	40	0.2							
4	11	79	14	0.03	28		30	137	86	1.52	7.4	-20		20	25	0	1.0	42	0.1							
5	15	79	17	0.007	10		5	180	109	1.88	7.8	-30		34	42	0	1.1	46	0.4							
6	5	79	20	0.005	13		45	139	84	2.00	6.9	-26		29	35	0	0.8	32	0.3							
7	6	79	28	0.001	7		2	247	137	2.56	8.2	-62		71	85	1	1.1	43	0.2	0.0	0.04	0.95	0.05	0.00		
7	30	79	23	0.005	0		30	246	134	3.48	8.0	-61		72	87	1	0.9	36	0.1	0.0	0.01	0.70	0.00	0.00		
11	1	79	17	0.003	8		25	286	148		8.2	-81		104	125	1		34	0.0							

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 29 77	0.1	0.01			24	0.0	0.00	0.0	2.6		11	0.0		4.0	0.00	0.0	2.4		0.1	0.0
7 26 77	0.1	0.01			33	0.0	0.00	0.1	3.3		12	0.0		4.7	0.00	0.0	2.0		0.0	0.0
8 23 77	0.2	0.01			32	0.0	0.01	0.1	3.7		11	0.0		4.5	0.02	0.0	2.2		0.0	0.0
9 27 77	0.0	0.00			32	0.0	0.00	0.0	3.2		10	0.0		5.0	0.02	0.0	2.2		0.0	0.0
10 26 77	0.1	0.02	0.0	0.00	23	0.0	0.00	0.1	2.7	0.10	8.8	0.0	0.0	4.1	0.00	0.0	2.6	0.1	0.0	0.0
11 29 77	0.1	0.00			10	0.0	0.00	0.1	2.2		6.3	0.0		2.8	0.00	0.0	2.9		0.0	0.0
12 20 77	0.1	0.00			15	0.0	0.00	0.0	2.2		8.1	0.0		3.2	0.01	0.0	2.8		0.1	0.0
1 24 78	0.1	0.03	0.0	0.00	17	0.0	0.00	0.1	2.9	0.00	9.0	0.1	0.0	3.5	0.01	0.0	2.3	0.3	0.0	0.0
3 7 78	0.1	0.03			12	0.1	0.01	0.1	2.1		8.3	0.0		2.9	0.03	0.1	2.4		0.2	0.0
4 18 78	0.0	0.00	0.0	0.00	19	0.0	0.00	0.1	2.4	0.07	10.0	0.0	0.0	3.8	0.01	0.0	2.2	0.1	0.0	0.0
5 16 78	0.1	0.00			11	0.0	0.00	0.1	2.2		7.1	0.0		2.9	0.00	0.0	2.9		0.0	0.0
6 14 78	0.0	0.01	0.0	0.00	34	0.0	0.00	0.0	5.8	0.00	11	0.0	0.0	4.2	0.01	0.0	2.7	0.2	0.0	0.0
7 12 78	0.1	0.01			45	0.1	0.00	0.0	4.4		19	0.0		4.2	0.02	0.1	1.6		0.1	0.0
8 15 78	0.1	0.01			34	0.0	0.00	0.0	3.4		10.0	0.0		2.8	0.01	0.1	2.0		0.1	0.0
12 11 78	0.1	0.00			14	0.0	0.00	0.0	1.8		6.2	0.0		2.0	0.01	0.0	2.2		0.0	0.0
1 23 79	0.2	0.00			12	0.0	0.01	0.2	1.9		6.7	0.0		2.3	0.02	0.0	2.9		0.0	0.2
3 15 79	0.1	0.00			13	0.0	0.04	0.1	2.9		7.4	0.0		4.7	0.01	0.0	2.4		0.0	0.0
4 11 79	0.1	0.00	0.2	0.00	12	0.0	0.00	0.0	2.1	0.05	7.2	0.0	0.0	2.4	0.02	0.0	2.8	0.0	0.0	0.1
5 15 79	0.1	0.00			19	0.0	0.00	0.0	2.4		8.6	0.0		2.9	0.02	0.0	2.7		0.0	0.3
6 5 79	0.2	0.00			13	0.0	0.01	0.2	2.5		6.8	0.0		2.7	0.00	0.0	3.1		0.0	0.0
7 6 79	0.1	0.02	0.0	0.00	25	0.0	0.03	0.0	3.4	0.25	10	0.0	0.1	3.4	0.03	0.1	3.1	0.1	0.1	0.0
7 30 79	0.1	0.01			33	0.0	0.00	0.0	2.8		9.9	0.0		2.8	0.00	0.1	2.4		0.1	0.0
11 1 79	0.0	0.02			33	0.0	0.00	0.0	2.5		9.8	0.0		2.7	0.02	0.0	1.4		0.0	0.1

TABLE 76. WATER QUALITY FOR SITE 3193 LETCHER COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
6 29 77	26	0.03			15	96	62	1.29	6.9			11	14	0	1.3	30	0.4				
7 26 77	22	0.06			30	99	51	1.71	7.1			14	17	0	0.6	22	0.0				
8 23 77	25	0.02			8	97	56	1.55	7.1			12	15	0	0.6	24	0.1				
9 27 77	18	0.07			45	106	61	1.73	6.9			20	25	0	1.1	24	0.1				
10 26 77	13	0.1			25	101	62	1.66	7.2			15	18	0	0.8	27	0.0				
11 29 77	8	5	57		55	75	46	1.46	7.0			6	7	0	1.3	21	0.1				
12 20 77	8	0.3			0	101	60	1.32	7.1			7	8	0	0.0	32	0.3				
11 1 79	16	0.02	2		8	93	54	1.87	7.4	-7		16	20	0	0.9	21	0.0				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 29 77	0.0	0.00			6.0	0.0	0.00	0.1	2.4		4.9	0.0		2.5	0.02	0.0	2.8		0.0	0.0
7 26 77	0.0	0.01			5.7	0.0	0.00	0.1	2.0		4.2	0.0		2.4	0.00	0.0	2.8		0.1	0.0
8 23 77	0.0	0.00			5.8	0.0	0.00	0.0	2.6		4.0	0.0		2.9	0.02	0.0	3.6		0.0	0.0
9 27 77	0.0	0.00			6.0	0.0	0.00	0.0	2.4		4.2	0.0		4.0	0.01	0.0	3.3		0.0	0.0
10 26 77	0.0	0.00	0.0	0.00	7.1	0.0	0.00	0.1	2.6	0.07	5.0	0.0	0.0	2.8	0.01	0.0	3.5	0.0	0.0	0.0
11 29 77	0.1	0.00			5.3	0.0	0.00	0.1	1.7		3.6	0.0		1.9	0.00	0.0	3.0		0.0	0.0
12 20 77	0.0	0.00			6.4	0.0	0.00	0.0	2.1		5.2	0.0		2.0	0.01	0.0	3.3		0.0	0.0
11 1 79	0.1	0.02			6.2	0.1	0.04	0.0	2.9		4.3	0.0		2.7	0.08	0.0	2.7		0.1	0.1

TABLE 77. WATER QUALITY FOR SITE 3201 MCCREARY COUNTY, KENTUCKY

STATION 777 WATER QUALITY																								
DATE		WATER TEMP		EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
6	2	77	16	0.006			40	36	25	4.57	7.0			8	10	0	0.8	4						
7	11	77	22	0.004			20	36	18	4.79	6.9			10	12	0	0.5	4	0.1					
8	4	77	20	0.0007			70	57	29	4.43	6.5			9	11	0	0.7	5	0.0					
8	31	77	21	0.0015			65	47	34	2.62	7.2			11	13	0	1.0	8	0.1					
10	6	77	12	0.008	13		15	44	29	2.30	6.8			8	10	0	1.0	7	0.1					
11	3	77	16	0.01	9		20	39	30	1.43	6.5			5	6	0	0.9	12	0.0					
12	1	77	10	0.2	74*		30	25	25	1.05	6.7			2	3	0	2.4	8	0.1					
12	28	77	4	0.05	12		4	28	28	1.46	6.3			5	6	0	1.2	8	0.2					
2	7	78	0	0.05			15	29	24	2.49	6.5			6	7	0	0.8	6	0.1					
3	20	78	10	0.09			35	27	20	1.81	6.3			4	5	0	0.9	5	0.2					
4	13	78	10	0.03	43		25	39	28	1.49	6.7			5	6	0	4.0	6	0.1					
5	10	78	23	0.15	97*		35	25	24	1.68	6.7			5	6	0	0.9	7	0.1					
6	8	78	17	0.09			65	35	28	1.74	6.8			9	11	0	1.0	7	0.4					
7	19	78	20	0.0015	114*		55	54	33	3.30	7.1			12	15	0	1.0	7	0.1					
8	8	78	20	0.05	64*		50	32	25	2.25	6.7			6	7	0	0.8	5	0.2					
12	1	78	4	0.002	21		15	33	25	2.23	6.9			7	8	0	0.8	6	0.1					
1	11	79	2	0.02	6		10	22	28	0.98	6.0			3	4	0	0.8	12	0.1					
3	6	79	7	0.01	18		10	23	26	1.09	6.4	3		3	4	0	0.8	10	0.1					
4	5	79	12	0.02			25	22	23	1.04	6.5	2		3	4	0	0.6	9	0.0					
5	9	79	16	0.004	25	0.00	75	37	30	1.40	6.3	3		4	5	0	0.7	9	0.4					
6	7	79	18	0.005	26		45	30	26	1.66	6.2	2		6	7	0	0.7	8	0.1					
7	3	79	20	0.0006	10		40	36	32	2.01	7.4	-2		9	11	0	0.9	9	0.1	0.0	0.05	0.85	0.95	0.00
7	24	79	21	0.0003	27		65	51	34	1.74	7.0	-2		9	11	0	0.8	10	0.1	0.0	0.09	0.40	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	NN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																	
6 2 77	0.0	0.00			1.7	0.0	0.00	0.1	1.1		1.7	0.0		1.9	0.01	0.0	4.0		0.0	0.0
7 11 77	0.1	0.00			2.1	0.0	0.00	0.2	1.6		1.8	0.1		2.1	0.02	0.0	4.0		0.0	0.0
8 4 77	0.0	0.00			2.6	0.0	0.00	0.1	1.8		2.6	0.0		2.5	0.00	0.0	4.2		0.0	0.0
8 31 77	0.1	0.01			2.7	0.0	0.00	0.2	1.5		2.3	0.0		1.9	0.00	0.0	4.0	0.0	0.0	0.0
10 6 77	0.0	0.00	0.0	0.00	2.1	0.0	0.00	0.1	0.9	0.00	1.9	0.0	0.0	1.7	0.00	0.0	3.6		0.0	0.0
11 3 77	0.2	0.00			2.1	0.0	0.00	0.1	1.2		1.9	0.0		1.2	0.01	0.0	3.6		0.2	0.0
12 1 77	0.1	0.01			1.2	0.0	0.00	0.1	0.9		1.3	0.0		1.5	0.02	0.0	3.8	0.0	0.2	0.0
12 28 77	0.1	0.00	0.0	0.00	1.3	0.1	0.00	0.2	1.0	0.08	1.7	0.0	0.0	1.5	0.02	0.0	3.8	0.0	0.2	0.0
2 7 78	0.1	0.00			1.5	0.0	0.01	0.1	1.0		1.8	0.0		1.8	0.01	0.0	3.6		0.1	0.0
3 20 78	0.2	0.00			1.1	0.0	0.00	0.1	0.6		1.3	0.0		1.4	0.00	0.0	2.8		0.0	0.0
4 13 78	0.1	0.00	0.0	0.00	1.4	0.0	0.00	0.1	0.9	0.00	1.7	0.0	0.0	1.7	0.01	0.0	3.9	0.0	0.0	0.0
5 10 78	0.1	0.00			1.8	0.0	0.00	0.1	0.8		1.3	0.0		1.3	0.00	0.0	3.5		0.0	0.0
6 8 78	0.1	0.00			1.6	0.0	0.00	0.1	1.0		1.6	0.0		1.7	0.00	0.0	3.0		0.0	0.0
7 19 78	0.0	0.00	0.0	0.00	3.8	0.0	0.00	0.1	1.7	0.00	2.3	0.1	0.0	1.9	0.00	0.0	3.6	0.0	0.0	0.0
8 8 78	0.1	0.01			1.8	0.0	0.00	0.2	1.0		1.3	0.0		1.2	0.01	0.0	4.0		0.0	0.1
12 1 78	0.1	0.00			1.9	0.0	0.01	0.1	1.0		1.4	0.0		1.6	0.02	0.0	3.7		0.0	0.0
1 11 79	0.1	0.00	0.1	0.00	1.4	0.0	0.00	0.0	0.8	0.09	1.5	0.0	0.0	1.4	0.01	0.0	3.3	0.0	0.1	0.1
3 6 79	0.1	0.00			1.4	0.0	0.03	0.1	0.9		1.4	0.0		1.4	0.02	0.0	3.2		0.0	0.3
4 5 79	0.1	0.00	0.0	0.00	1.2	0.1	0.02	0.1	0.8	0.08	1.0	0.0	0.0	1.2	0.02	0.0	3.3	0.0	0.0	0.0
5 9 79	0.1	0.00			1.7	0.0	0.01	0.1	1.0		1.8	0.1		1.4	0.01	0.0	4.3		0.0	0.1
6 7 79	0.1	0.00			1.5	0.0	0.00	0.1	0.9		1.6	0.0		1.4	0.00	0.0	4.0		0.0	0.0
7 3 79	0.1	0.01	0.0	0.00	2.6	0.0	0.00	0.1	1.5	0.15	1.8	0.0	0.1	1.8	0.00	0.0	3.8	0.0	0.0	0.0
7 24 79	0.1	0.01			2.3	0.0	0.01	0.1	1.5		1.8	0.0		2.0	0.01	0.0	4.4		0.0	0.0

TABLE 78. WATER QUALITY FOR SITE 3202 MCCREARY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER								
6 2 77	15	0.008			0	91	57	1.19	5.0			0	0	0	1.2	31						
7 11 77	18	0.015			15	135	96	1.07	6.6			7	8	0	0.7	54	0.6					
8 4 77	20	0.005			100	168	106	1.49	6.5			16	19	0	0.8	51	0.0					
8 31 77	21	0.0025			30	116	76	0.91	4.5			0	0	0	0.8	45	0.1					
10 6 77	14	0.06	25		0	110	85	0.90	5.1			0	0	0	1.6	50	0.5					
11 3 77	14	0.025	22		0	156	92	0.99	4.4			0	0	0	0.9	58	0.0					
12 1 77	10	0.1	57*		0	115	68	0.81	4.6			0	0	0	2.8	39	0.6					
12 28 77	4	0.02	6		0	154	99	1.04	6.1			2	3	0	1.4	59	0.6					
2 7 78	1	0.1			20	152	86	1.12	5.2			0	0	0	0.8	52	0.6					
3 20 78	11	0.1			95	388	246	0.97	4.1			0	0	0	1.1	170	0.2					
4 13 78	11	0.05	20		10	127	70	1.15	6.5			2	3	0	4.2	37	0.2					
5 10 78	25		50*		35	136	90	1.01	6.5			7	8	0	1.0	54	0.1					
6 8 78	20	0.04	139*		120	296	177	1.03	4.9			0	0	0	1.0	97	6.0					
7 19 78	19	0.005	48*		15	276	166	1.20	6.8			7	9	0	1.3	100	0.1					
8 8 78	22	0.07	40*		9	525	324	1.01	4.4			0	0	0	1.0	220	0.8					
9 27 78	17	0.0009	29*		9	311	202	0.83	6.6			4	5	0	1.2	130	0.2					
10 31 78	16	0.0008			30	325	220	0.77	6.2	-2		2	2	0	1.3	150	0.0					
12 1 78	10	0.001	0		1	360	247	1.00	5.9			2	2	0	1.1	150	0.0					
1 16 79	2	0.002			25	357	223	1.24	6.4	0		7	8	0	1.6	140	0.3					
3 6 79	11	0.025	7		15	394	284	1.25	6.9			7	8	0	0.7	190	0.2					
4 5 79	17	0.01			20	243	173	0.96	4.9	7		0	0	0	0.7	120	0.2					
5 9 79	19	0.01	20	0.11	40	340	251	1.18	6.0	5		1	1	0	1.0	170	0.3					
6 7 79	23	0.01	20		35	564	400	0.99	6.5	11		8	10	0	0.7	280	0.3					
7 3 79	19	0.003	67		55	872	446	0.82	4.3	39		0	0	0	1.4	330	0.1	0.0	0.20	1.15	0.05	0.00
7 24 79	23	0.004	11	10	65	927	564	0.89	4.3	37		0	0	0	1.1	410	0.1	0.0	0.25	0.80	0.00	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 2 77	0.4	0.00			4.0	0.0	0.00	0.0	1.3		5.0	0.3		2.0	0.05	0.0	5.3		0.0	0.0
7 11 77	0.3	0.00			9.5	0.0	0.00	0.1	2.3		7.4	0.5		3.2	0.09	0.1	5.0		0.0	0.0
8 4 77	0.2	0.00			16	0.0	0.00	0.3	2.2		7.6	0.5		3.4	0.03	0.0	6.9		0.0	0.0
8 31 77	0.4	0.01			4.8	0.0	0.00	0.1	1.7		5.5	0.6		3.4	0.06	0.0	6.0		0.0	0.1
10 6 77	0.6	0.02	0.1	0.00	6.0	0.0	0.00	0.0	1.3	0.04	6.3	0.6	0.0	3.9	0.06	0.0	5.4	0.0	0.0	0.1
11 3 77	0.5	0.00			6.6	0.0	0.00	0.0	1.8		7.9	0.6		4.6	0.05	0.0	4.8		0.0	0.0
12 1 77	0.4	0.00			4.4	0.0	0.00	0.1	1.3		5.1	0.6		2.3	0.04	0.0	4.3		0.2	0.1
12 28 77	0.4	0.00	0.0	0.00	7.2	0.1	0.00	0.2	2.1	0.10	9.7	0.8	0.0	3.4	0.06	0.1	4.5	0.1	0.3	0.0
2 7 78	0.4	0.00			6.7	0.0	0.01	0.1	1.9		9.1	0.7		3.2	0.05	0.0	3.9		0.1	0.1
3 20 78	1.5	0.00			22	0.0	0.01	0.0	1.6		29	3.6		2.3	0.17	0.0	4.4		0.1	0.2
4 13 78	0.1	0.00	0.0	0.00	5.2	0.0	0.00	0.2	1.8	0.01	6.8	0.1	0.0	3.5	0.03	0.0	4.2	0.0	0.0	0.0
5 10 78	0.1	0.01			7.3	0.0	0.00	0.2	1.6		7.8	0.9		2.9	0.04	0.0	4.3		0.0	0.0
6 8 78	0.1	0.00			16	0.0	0.00	0.2	3.0		18	2.7		4.5	0.09	0.0	3.7		0.0	0.1
7 19 78	0.1	0.01	0.0	0.00	16	0.0	0.00	3.7	3.1	0.02	18	3.6	0.0	4.7	0.04	0.0	4.5	0.1	0.0	0.0
8 8 78	1.6	0.02			44	0.1	0.01	0.9	3.5		28	7.2		3.4	0.31	0.1	4.1		0.1	0.6
9 27 78	0.3	0.02			12	0.1	0.01	9.5	2.9		17	9.3		5.4	0.12	0.2	5.3		0.2	0.0
10 31 78	0.1	0.01			12	0.1	0.01	7.3	2.7		18	13		6.1	0.11	0.0	5.0		0.1	0.1
12 1 78	0.3	0.00			17	0.2	0.01	9.6	3.3		23	16		9.3	0.14	0.1	5.6		0.1	0.1
1 16 79	0.3	0.00	0.1	0.01	33	0.0	0.01	1.5	2.2	0.20	22	4.2	0.0	4.6	0.10	0.1	3.6	0.1	0.1	0.2
3 6 79	0.4	0.00			42	0.0	0.03	0.6	2.6		31	3.3		4.4	0.12	0.0	3.6		0.1	0.4
4 5 79	0.7	0.01	0.0	0.00	14	0.0	0.00	0.1	1.5	0.10	19	2.7	0.0	2.8	0.13	0.0	4.1	0.1	0.2	0.2
5 9 79	0.4	0.01			35	0.0	0.01	0.6	2.0		26	4.3		4.7	0.14	0.1	3.9		0.1	0.2
6 7 79	1.3	0.01			45	0.1	0.01	0.7	3.1		38	8.9		6.5	0.28	0.0	5.0		0.1	0.3
7 3 79	2.0	0.04	0.1	0.00	40	0.3	0.00	3.7	3.0	0.45	40	11	0.0	6.6	0.40	0.8	3.8	0.4	1.6	0.3
7 24 79	2.0	0.02			61	0.2	0.03	2.8	4.2		49	14		9.3	0.34	0.2	4.7		0.1	0.3

TABLE 79. WATER QUALITY FOR SITE 3203 MCCREARY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3	NO3	NO3	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L									
----- MILLIGRAMS PER LITER -----																
8 4 77	22	0.005			4	280	169	0.94	4.3		0	0	0	0.8	110	0.1
8 31 77	24	0.03			4	352	241	0.94	3.6		0	0	0	0.8	160	0.1
10 6 77	13	0.04	7		0	438	277	0.91	4.4		0	0	0	1.7	190	0.1
11 3 77	14	0.15	23		4	425	297	0.92	4.1		0	0	0	2.2	210	0.0
12 1 77	10	1.0	73*		4	306	169	1.01	4.3		0	0	0	1.0	110	0.1
12 28 77	3	0.8	4		0	360	263	0.97	4.4		0	0	0	0.7	180	0.1
2 7 78	0	0.3			0	457	354	0.83	4.4		0	0	0	1.1	260	0.0
3 20 78	12	0.06			0	346	245	1.01	4.2		0	0	0	1.5	170	0.2
4 13 78	11	0.08	28		0	415	290	0.95	4.3		0	0	0	2.3	200	0.1
5 10 78	26	0.3	27*		7	301	201	0.89	4.5		0	0	0	1.4	140	1.1
6 8 78	21	0.1			50	339	208	0.93	4.2		0	0	0	1.2	150	0.1
7 19 78	20	0.09	42*		15	274	204	1.12	4.3		0	0	0	1.3	130	0.1
8 8 78	22	0.07	23*		8	323	182	0.91	4.5		0	0	0	1.4	120	0.7
9 27 78	17	0.0007	36*		40	345	215	0.83	4.6		0	0	0	1.4	150	0.1
10 31 78	15	0.002	1		0	440	266	1.08	5.1	9	0	0	0	2.0	180	0.0
12 1 78	6	0.01	10		5	487	322	1.15	4.6		0	0	0	2.2	210	0.2
1 16 79	2	0.01	5		5	365	222	1.04	4.4		0	0	0	1.5	150	0.2
3 6 79	9	0.02				408	271	1.02	4.4	19	0	0	0	2.0	180	0.5
4 5 79	14	0.03			5	302	237	0.79	4.9		0	0	0	1.3	170	0.1
5 9 79	18	0.007	7	0.00	15	365	300	0.79	4.7	10	0	0	0	1.1	220	1.6
6 7 79	21	0.01	1		15	378	257	0.97	4.7	14	0	0	0	0.9	180	0.1
7 3 79	20	0.007	11		5	602	404	0.93	4.5	24	0	0	0	1.1	280	0.0 0.0 0.03 0.60 0.15 0.01
7 24 79	19	0.04	1		20	551	323	0.97	5.0		0	0	0	1.6	220	0.2 0.0 0.01 0.90 0.00 0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
8 4 77	1.1	0.00			12	0.0	0.00	0.1	3.0		17	1.5		4.6	0.13	0.0	7.3		0.0	0.1
8 31 77	2.4	0.00			19	0.0	0.00	0.2	3.0		24	2.8		5.7	0.18	0.0	7.8		0.0	0.2
10 6 77	3.2	0.00	0.0	0.00	22	0.0	0.00	0.0	2.1	0.08	28	3.6	0.0	5.5	0.22	0.0	7.6	0.1	0.0	0.2
11 3 77	3.6	0.03			22	0.0	0.00	0.1	2.8		32	5.1		5.3	0.21	0.0	7.3		0.0	0.2
12 1 77	3.5	0.01			12	0.0	0.00	0.3	1.8		20	3.9		2.7	0.12	0.0	5.1		0.3	0.2
12 28 77	4.5	0.00	0.0	0.00	16	0.2	0.00	0.1	2.5	0.20	32	5.2	0.1	3.7	0.20	0.1	5.7	0.1	0.4	0.2
2 7 78	5.8	0.00			22	0.1	0.01	0.1	2.3		39	5.9		4.2	0.26	0.0	5.8		0.1	0.2
3 20 78	3.8	0.02			17	0.1	0.01	0.2	2.2		31	4.5		3.9	0.19	0.0	5.4		0.1	0.2
4 13 78	3.7	0.00	0.0	0.00	19	0.0	0.00	0.1	2.3	0.08	35	5.2	0.0	4.5	0.21	0.0	6.7	0.1	0.0	0.2
5 10 78	2.4	0.00			13	0.0	0.00	0.1	2.1		21	2.9		3.8	0.14	0.0	5.2		0.0	0.2
6 8 78	2.5	0.00			14	0.0	0.00	0.2	2.2		24	4.1		3.3	0.14	0.0	4.9		0.0	0.2
7 19 78	1.2	0.01	0.0	0.00	17	0.0	0.00	0.1	2.8	0.04	25	2.7	0.0	4.7	0.16	0.0	6.8	0.1	0.0	0.2
8 8 78	1.0	0.02			14	0.0	0.00	0.1	2.9		18	4.6		2.6	0.13	0.0	5.5		0.1	0.2
9 27 78	0.8	0.02			16	0.1	0.01	0.2	2.6		19	1.6		5.8	0.15	0.2	6.1		0.3	0.1
10 31 78	0.7	0.01			28	0.0	0.00	0.1	2.7		28	4.4		6.8	0.24	0.1	7.0		0.1	0.2
12 1 78	2.8	0.00			37	0.0	0.01	0.1	3.1		34	6.8		8.3	0.27	0.1	7.2		0.1	0.2
1 16 79	1.9	0.00	0.1	0.01	22	0.0	0.01	0.1	2.0	0.20	25	4.4	0.0	3.6	0.18	0.0	4.5	0.1	0.1	0.3
3 6 79	3.2	0.01			28	0.1	0.02	0.2	2.2		29	5.0		3.7	0.21	0.0	4.6		0.1	0.8
4 5 79	1.3	0.01	0.0	0.00	20	0.1	0.01	0.2	2.0	0.25	20	3.8	0.0	6.1	0.16	0.1	4.2	0.1	0.2	0.2
5 9 79	1.0	0.01			24	0.0	0.00	0.1	2.2		28	4.2		3.7	0.17	0.0	4.9		0.1	0.2
6 7 79	1.4	0.01			23	0.1	0.02	0.1	2.5		28	4.7		4.0	0.21	0.1	6.0		0.1	0.2
7 3 79	3.0	0.01	0.0	0.00	38	0.1	0.02	0.1	3.7	0.45	39	6.6	0.1	7.5	0.40	0.1	8.3	0.3	0.1	0.3
7 24 79	0.8	0.03			37	0.0	0.01	0.0	2.8		30	5.1		4.8	0.20	0.1	6.6		0.1	0.2

TABLE 80. WATER QUALITY FOR SITE 3205 MCCREARY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L														
4 16 79		0.15			7	285	186	0.87	4.6		0	0	0	0.7	130	0.2				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
4 16 79	0.5	0.00			16	0.0	0.01		1.9		17	2.8		4.1	0.14	0.0	4.8		0.1	0.2

TABLE 81. WATER QUALITY FOR SITE 3206 MCCREARY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L														
6 2 77	15	0.015			8	194	76	1.40	6.3		10	12	0	1.9	38					
7 11 77	21	0.06			8	258	132	1.03	6.4		10	12	0	2.4	82	0.2				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
6 2 77	0.0	0.00			5.8	0.0	0.00	0.1	2.0		6.8	2.3		4.6	0.01	0.0	3.6		0.0	0.0
7 11 77	0.0	0.00			14	0.0	0.00	0.7	3.4		11	3.3		3.8	0.06	0.1	1.9		0.0	0.1

TABLE 82. WATER QUALITY FOR SITE 3208 MCCREARY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L														
4 16 79		0.02			40	466	282	1.00	7.3		17	21	0	0.8	190	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
4 16 79	0.1	0.01			36	0.0	0.01	0.0	3.3		24	2.3		4.8	0.04	0.1	3.6		0.1	0.0

TABLE 83. WATER QUALITY FOR SITE 3211 MAGOFFIN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
8 3 77	22	0.04			50	114	62	2.58	7.6		20	25	0	0.9	18	0.1					
10 4 77	13	0.05	5		20	111	60	3.42	7.6		27	33	0	2.4	14	0.2					
11 11 77	8	0.1	22		15	91	56	2.76	6.5		19	23	0	1.6	16	0.1					
12 20 77	7	0.1			0	96	55	1.75	7.1		13	16	0	1.4	20	0.2					
1 30 78	2	0.15			35	74	46	1.65	7.1		10	12	0	0.9	18	0.2					
3 2 78	1	0.8			30	93	56	1.78	7.1		10	12	0	1.3	23	0.1					
3 30 78	10	0.8			50	71	49	1.74	7.2		9	11	0	0.9	19	0.1					
4 27 78	11	0.4	54			64	40	1.82	6.5		8	10	0	1.2	16	0.1					
5 18 78	18	0.3	13		20	74	52	1.67	7.0		11	13	0	1.0	20	0.1					
6 21 78	21	0.01				82	54	3.17	7.3		23	28	0	0.9	13	0.2					
7 20 78	20	0.03			40	87	55	2.97	7.4		24	29	0	1.1	14	0.1					
8 22 78	24	0.02	47*		8	120	67	2.83	7.4		24	29	0	7.2	14	0.2					
10 6 78	16	0.0002	22*		8	98	64		7.6		41	50	0		11						
11 20 78	12	0.01	10		7	90	61	3.82	7.8		33	40	0	2.5	12	0.2					
12 28 78	3	0.05	16		9	72	51	1.83	7.0	-9	12	15	0	1.1	19	0.1					
1 29 79	2	0.2	2		4	63	38	1.78	6.9		7	8	0	1.5	14	0.1					
3 2 79	7	0.1	16		8	62	42	1.59	6.9	-3	9	11	0	0.6	17	0.1					
4 6 79	8	0.09	17		15	64	43	1.45	6.8		6	7	0	0.7	19	0.1					
5 22 79	16	0.008	5		10	83	47	1.80	7.2	-10	12	15	0	0.7	18	0.1					
6 26 79	18	0.002	13		15	80	55	1.88	7.6	-12	20	24	0	1.3	18	0.1	0.0	0.05	0.70	0.05	0.01
8 2 79	25	0.07	10		35	81	54	1.64	7.2	-10	15	18	0	1.5	19	0.1	0.0	0.04	0.65	0.15	0.01
9 5 79	20	0.001	3		20	93	59	4.64	7.6	-26	34	41	0	1.2	10	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 77	0.0	0.00			7.8	0.0	0.00	0.6	2.3		5.1	0.6		3.7	0.01	0.1	4.3		0.1	0.1
10 4 77	0.0	0.00	0.0	0.00	8.7	0.0	0.00	0.2	1.6	0.03	4.3	0.3	0.0	5.4	0.00	0.0	2.9	0.1	0.0	0.1
11 11 77	0.0	0.00			7.9	0.0	0.00	0.2	1.4		4.1	0.2		4.1	0.00	0.0	4.1		0.0	0.0
12 20 77	0.1	0.00			5.9	0.0	0.00	0.3	1.4		4.3	0.2		2.7	0.01	0.0	4.2		0.1	0.0
1 30 78	0.1	0.00	0.0	0.00	4.6	0.0	0.00	0.2	1.7	0.00	3.0	0.1	0.0	3.0	0.03	0.0	3.7	0.0	0.0	0.0
3 2 78	0.1				5.9	0.1	0.01	0.2	1.9		5.0	0.1		3.5	0.03	0.1	3.7		0.3	0.0
3 30 78	0.1	0.01			5.0	0.1	0.00	0.2	1.6		4.0	0.1		2.5	0.03	0.1	4.2		0.2	0.0
4 27 78	0.1	0.00	0.0	0.00	4.8	0.0	0.04	0.1	1.6	0.03	3.1	0.1	0.0	2.2	0.03	0.0	2.8	0.0	0.0	0.0
5 18 78	0.1	0.01			5.5	0.0	0.00	0.2	1.5		3.8	0.1		2.8	0.01	0.0	4.4		0.1	0.0
6 21 78	0.0	0.00	0.0	0.00	6.7	0.0	0.00	0.2	1.9	0.00	4.5	0.1	0.0	2.8	0.01	0.0	4.2	0.0	0.1	0.0
7 20 78	0.0	0.00	0.0	0.00	7.4	0.0	0.00	0.3	1.8	0.00	4.3	0.2	0.0	2.6	0.00	0.0	4.2	0.0	0.1	0.0
8 22 78	0.0	0.00			8.2	0.0	0.01	0.3	2.3		5.0	0.1		3.5	0.02	0.0	5.3		0.1	0.0
10 6 78	0.0	0.00	0.0	0.00	9.1	0.0	0.00	0.1	2.5	0.05	5.4	0.0	0.0	2.6	0.00	0.0	3.9	0.0	0.0	0.0
11 20 78	0.0	0.01			7.8	0.0	0.01	0.1	1.9		4.9	0.0		3.6	0.01	0.0	3.6		0.1	0.0
12 28 78	0.1	0.00			5.9	0.0	0.00	0.3	1.3		3.5	0.1		3.0	0.01	0.0	4.3		0.0	0.0
1 29 79	0.0	0.00			4.6	0.0	0.00	0.2	1.0		2.8	0.1		1.7	0.01	0.0	3.5		0.0	0.0
3 2 79	0.1	0.01	0.0	0.00	4.6	0.0	0.00	0.1	1.1	0.20	3.1	0.0	0.0	1.8	0.02	0.0	3.6	0.0	0.0	0.0
4 6 79	0.0	0.00	0.0	0.00	4.7	0.0	0.00	0.2	1.2	0.04	2.9	0.0	0.2	2.1	0.01	0.0	3.7	0.0	0.0	0.0
5 22 79	0.0	0.00			5.8	0.0	0.00	0.1	1.4		3.4	0.1		2.1	0.01	0.0	3.5		0.0	0.0
6 26 79	0.0	0.01			6.2	0.0	0.02	0.2	1.4		3.7	0.1		2.2	0.00	0.0	4.3		0.0	0.0
8 2 79	0.0	0.01	0.1	0.00	5.9	0.0	0.00	0.2	1.3	0.02	3.4	0.1	0.0	2.2	0.01	0.0	4.8	0.0	0.0	0.2
9 5 79	0.0	0.01			8.7	0.0	0.03	0.2	2.2		4.8	0.0		2.6	0.01	0.0	3.9		0.0	0.0

TABLE B4. WATER QUALITY FOR SITE 3212 MAGOFFIN COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	NO3 CO3	CL	SO4	AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UN/CM	MG/L					MILLIGRAMS PER LITER									
8	3	77	21	0.03			10	99	57	2.22	7.5		21	26	0	0.5	19	0.1				
10	4	77	11	0.06	17		8	89	54	2.97	6.8		20	24	0	1.6	14	0.1				
11	11	77	9	0.09	16		8	70	44	2.41	7.0		14	17	0	1.6	13	0.0				
12	20	77	6	0.2			0	60	44	1.86	7.2		10	12	0	1.5	16	0.0				
1	30	78	2	0.15			35	54	36	1.59	7.0		7	9	0	0.8	14	0.0				
3	2	78	2	0.6			30	59	40	1.57	6.8		7	9	0	1.2	16	0.0				
3	30	78	12	1.5			120	56	49	1.27	7.1		7	9	0	0.9	21	0.1				
4	26	78	10	1.5	3240			46	32	1.26	6.2		2	3	0	1.2	15	0.2				
5	18	78	18	0.3	38*		75	98	65	1.68	7.0		12	15	0	1.0	20	2.2				
6	21	78	24	0.01			140	87	4.84	7.6			48	58	0	2.2	15	0.3				
7	20	78	24	0.1	66*		40	142	84	2.74	7.8		43	52	0	1.2	23	0.1				
8	22	78	20	0.004	62*		25	193	126	1.94	7.6		37	45	0	1.2	52	0.3				
10	6	78	17	0.015	83*		95	349	184	1.72	7.8		51	62	0	27	58	1.2				
11	20	78	13	0.04	14		45	244	129	2.60	7.8	-52	61	73	0	1.6	40	0.3				
12	28	78	4	0.04	260		60	238	139	1.42	7.5	-30	37	45	0	0.6	64	1.3				
1	29	79	2	0.15	42		65	339	224	1.56	7.8		46	56	0	0.7	110	0.6				
3	2	79	7	0.15	46		7	367	240	1.50	7.6	-34	35	43	0	1.1	130	1.4				
4	6	79	12	0.15	40		30	347	242	1.47	7.6		32	39	0	2.7	130	1.3				
5	22	79	15	0.03	38		65	360	223	1.97	8.2	-67	78	93	1	1.3	99	0.1				
6	26	79	25	0.005	26		20	576	430	1.15	8.0	-34	49	59	0	4.4	260	2.6	0.3	1.30	4.40	0.05
8	2	79	24	0.1	26	0.11	45	622	442	1.36	8.1	-58	68	82	1	3.2	250	1.4	0.2	0.27	0.90	0.05
9	5	79	22	0.8	156		220	559	376	1.22	7.6	-28	32	39	0	2.6	220	5.3				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 77	0.0	0.00			7.1	0.0	0.01	0.3	2.2		4.3	0.1		3.2	0.01	0.1	3.0		0.1	0.0
10 4 77	0.0	0.00	0.0	0.00	7.7	0.0	0.00	0.5	1.7	0.04	4.4	0.1	0.0	3.4	0.00	0.0	3.8	0.0	0.0	0.0
11 11 77	0.0	0.00			5.7	0.0	0.00	0.2	1.3		2.8	0.1		3.0	0.00	0.0	4.0		0.0	0.0
12 20 77	0.0	0.00			4.5	0.0	0.00	0.2	1.3		3.4	0.2		2.5	0.00	0.0	4.2		0.0	0.0
1 30 78	0.1	0.00	0.0	0.00	2.8	0.0	0.00	0.2	1.9	0.00	2.1	0.0	0.0	2.7	0.03	0.0	3.2	0.0	0.0	0.0
3 2 78	0.1	0.00			3.4	0.0	0.00	0.2	1.1		3.1	0.0		2.3	0.00	0.0	3.9		0.0	0.0
3 30 78	0.3				3.6	0.1	0.00	0.4	1.8		3.3	0.1		2.1	0.03	0.1	4.5		0.3	0.0
4 26 78	0.2	0.00	0.0	0.00	2.6	0.0	0.01	0.1	2.1	0.03	2.1	0.2	0.0	1.9	0.02	0.0	2.1	0.0	0.0	0.0
5 18 78	0.1	0.01			6.4	0.0	0.00	0.2	2.0		4.9	0.2		2.7	0.03	0.0	4.7		0.1	0.0
6 21 78	0.1	0.01	0.0	0.00	12	0.1	0.02	1.2	4.0	0.00	8.6	1.1	0.0	4.3	0.03	0.1	3.8	0.1	0.2	0.0
7 20 78	0.0	0.00	0.0	0.00	11	0.0	0.00	0.2	3.4	0.04	7.0	1.1	0.1	3.3	0.00	0.0	3.3	0.1	0.1	0.0
8 22 78	0.1	0.01			17	0.0	0.01	0.4	5.0		12	1.8		5.1	0.03	0.1	3.9		0.1	0.0
10 6 78	0.2	0.00	0.0	0.00	21	0.0	0.01	0.6	4.9	0.08	18	2.1	0.0	6.1	0.02	0.1	3.9	0.1	0.1	0.0
11 20 78	0.1	0.00			20	0.0	0.01	1.6	3.6		10	0.9		5.9	0.01	0.0	3.4		0.0	0.0
12 28 78	0.1	0.00			18	0.0	0.00	0.3	3.2		11	2.0		3.4	0.05	0.1	4.0		0.0	0.1
1 29 79	0.2	0.00			36	0.1	0.03	0.3	5.0		19	3.8		5.7	0.08	0.0	4.4		0.0	0.1
3 2 79	0.1	0.00			40	0.0	0.00	0.2	4.0		23	3.6		4.0	0.08	0.1	3.6		0.1	0.0
4 6 79	0.1	0.00			37	0.0	0.01	0.2	4.7		26	3.3		3.6	0.06	0.0	3.1		0.0	0.0
5 22 79	0.1	0.00			37	0.0	0.00	0.4	3.8		24	2.2		4.5	0.02	0.0	2.0		0.1	0.0
6 26 79	0.1	0.01			63	0.0	0.01	0.3	7.5		37	4.8		5.0	0.06	0.1	2.8		0.1	0.2
8 2 79	0.2	0.01	0.1	0.00	79	0.0	0.01	0.2	6.2	0.20	37	4.2	0.1	4.7	0.02	0.1	2.9	0.2	0.1	0.0
9 5 79	0.1	0.00			57	0.1		0.1	9.3		33	2.8		4.7	0.08	0.1	2.5		0.1	0.0

TABLE 85. WATER QUALITY FOR SITE 3214 MAGOFFIN COUNTY, KENTUCKY

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	DRTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
8	3	77	22	0.007			10	8840	5890		6.2			4	5	0	3800	12	0.4					
10	4	77	13	0.05			15	9680	5810		6.7			7	8	0	3700	9	0.5					
11	11	77	9	0.04	43		4	3210	1480	46.3	6.7			13	16	0	780	10	1.0					
12	20	77	7	0.06			2	1820	845	7.80	6.7			4	5	0	480	15	0.2					
1	30	78	2	0.05			20	56	38	1.39	7.0			8	10	0	0.8	16	0.1					
3	2	78	0	0.5			25	738	400	1.18	6.5			7	8	0	230	16	0.1					
3	30	78	12	0.25			8	600	299	2.83	6.9			9	11	0	160	17	0.1					
4	27	78	10	0.3	31		0	394	201	3.48	6.4			7	8	0	98	13	0.1					
5	18	78	19	0.2	23*		10	555	338		7.0			11	13	0	200	4	0.2					
6	21	78	23	0.0003				2240	1270		7.2			20	24	0	800	10	0.1					
7	20	78	24	0.006			20	1570	807	8.67	7.4			20	24	0	450	12	0.1					
8	22	78	24	0.001	49*		9	3000	1730	21.7	7.4			19	23	0	980	13	0.4					
10	6	78	16	0.0001				5690	2950		7.4			29	35	0	1900	12	0.0					
11	20	78	12	0.004	51		35	11900	7360	38.2	6.6			9	11	0	4200	9	65					
12	28	78	4	0.02	6		5	884	403	3.83	7.4	-4		12	15	0	210	13	3.3					
1	29	79	2	0.09	8		4	647	341	3.12	6.7			6	7	0	180	17	0.1					
3	2	79	7	0.07	2		6	421	208	2.50	6.8			7	8	0	99	17	0.1					
4	6	79	8	0.07	2		5	326	168	2.52	7.1			8	10	0	68	21	0.1					
5	22	79	16	0.001	14		3	2800	1290		6.9			23	28	0	790	16	0.4					
6	26	79	18	0.006	8		10	1100	517	0.57	7.2			20	24	0	300	15	0.2	0.2	0.05	1.15	0.10	0.00
8	2	79	26	0.03		0.01	15	777	399		7.3	-10		20	25	0	230	14	0.1	0.2	0.13	0.75	0.00	0.01
9	5	79	21	0.002	27		50	2540	1150		7.4			25	30	0	720	12	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 77	0.9	0.03			430	0.1	0.02	1.4	20		150	11		1500	0.22	0.5	5.8		0.5	0.1
10 4 77	0.8	0.04	7.8	0.00	480	0.1	0.00	1.4	14	2.0	120	9.3	0.2	1400	0.15	0.3	4.2	46	0.3	0.2
11 11 77	0.2				160	0.0	0.00	0.0	6.6		44	2.4		450	0.04	0.1	4.0		0.1	0.0
12 20 77	0.1	0.00			77	0.0	0.00	0.3	4.1		32	1.0		220	0.04	0.1	4.3		0.2	0.0
1 30 78	0.0	0.00	0.0	0.00	3.2	0.0	0.00	0.3	1.5	0.00	1.9	0.1	0.0	2.9	0.03	0.0	3.1	0.0	0.0	0.0
3 2 78	0.1	0.06			29	0.0	0.00	0.2	2.1		12	0.4		100	0.01	0.0	3.7		0.1	0.0
3 30 78	0.1	0.02			21	0.0	0.00	0.2	2.0		9.3	0.4		80	0.01	0.0	3.8		0.0	0.0
4 27 78	0.2	0.00	0.2	0.00	13	0.0	0.01	0.2	2.1	0.08	6.1	0.3	0.0	57	0.03	0.0	3.1	0.7	0.0	0.0
5 18 78	0.1	0.02			22	0.1	0.01	0.3	2.7		10	0.3		80	0.05	0.1	4.9		0.2	0.0
6 21 78	0.1	0.03	1.0	0.00	96	0.1	0.01	1.7	12	0.45	44	1.1	0.0	280	0.05	0.1	4.1	6.6	0.3	0.0
7 20 78	0.1	0.01	0.7	0.00	66	0.0	0.00	0.8	10	0.20	27	0.6	0.0	210	0.00	0.1	3.9	4.3	0.2	0.0
8 22 78	0.3	0.01			150	0.0	0.01	0.3	9.9		50	1.8		500	0.07	0.4	5.3		0.2	0.0
10 6 78	0.6	0.02	4.5	0.00	280	0.0	0.01	12	18	1.0	89	5.4	0.1	600	0.10	0.6	4.1	22	0.2	0.0
11 20 78	1.4	0.01			490	0.0	0.00	1.6	18		140	8.7		2200	0.20	1.1	3.5		0.4	0.1
12 28 78	0.1	0.01			37	0.1	0.01	0.2	2.3		11	0.4		100	0.05	0.1	3.6		0.2	0.0
1 29 79	0.1	0.00			30	0.0	0.00	0.1	2.2		9.0	0.3		90	0.01	0.0	3.7		0.0	0.0
3 2 79	0.1	0.00			18	0.0	0.00	0.1	1.8		6.4	0.2		51	0.02	0.1	4.0		0.0	0.0
4 6 79	0.1	0.00			14	0.0	0.00	0.1	1.8		5.6	0.2		42	0.02	0.0	4.4		0.0	0.0
5 22 79	0.2	0.00			120	0.0	0.00	0.3	7.7		38	0.7		290	0.04	0.2	3.8		0.2	0.0
6 26 79	0.2	0.01			47	0.0	0.01	0.1	4.0		15	0.3		110	0.02	0.1	4.1		0.1	0.0
8 2 79	0.1	0.01	0.3	0.00	28	0.0	0.04	0.2	2.9	0.15	9.1	0.4	0.0	89	0.00	0.0	4.9	1.0	0.0	0.2
9 5 79	0.4	0.03			110	0.0	0.00	0.1	11		31	0.8		240	0.02	0.1	3.4		0.1	0.0

TABLE B6. WATER QUALITY FOR SITE 3221 MARTIN COUNTY, KENTUCKY

DATE		WATER TEMP		EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 #NO3 NH3			TOT N	TOT P	TOT ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
9	14	77	19	0.002			25	98	55	8.58	7.0			29	35	0	1.7	5	0.1					
10	5	77	14	0.015			10	97	57	3.64	6.5			21	26	0	0.8	12	0.1					
11	16	77	8	0.07	12		15	66	46	1.86	6.8			11	14	0	1.4	16	0.1					
12	22	77	4	0.07			0	58	39	1.77	7.0			8	10	0	1.4	14	0.1					
2	1	78	0	0.06			20	54	35	1.26	6.7			6	7	0	0.9	15	0.1					
3	1	78	3	0.1			30	56	36	1.46	6.7			5	6	0	1.3	15	0.1					
4	4	78	14	0.09	14		0	53	37	1.68	6.7			6	7	0	0.9	14	0.1					
4	25	78	13	0.02	55*		35	55	38	1.70	7.0			7	9	0	0.9	15	0.1					
5	22	78	18	0.07	37*		2	57	41	1.88	7.2			11	14	0	0.7	15	0.0					
6	22	78	24	0.025				63	48	2.83	7.2			20	25	0	1.2	12	0.2					
7	21	78	24	0.0000	36*		45	90	58	6.23	7.5			30	37	0	2.5	7	0.4					
8	23	78	24	0.002	43*		30	84	66	4.24	7.6			30	36	0	2.0	12	0.2					
10	4	78	20	0.01	59*		40	83	56	3.94	7.2			30	37	0	1.4	9	0.1					
11	20	78	11	0.004	6		25	104	67	5.37	8.0			38	46	0	2.4	9	0.2					
12	27	78	5	0.05	7		8	52	43	1.57	7.1	-4		9	11	0	0.8	17	0.1					
1	30	79	3	0.15	4		2	47	34	1.64	6.6	0		5	6	0	0.7	14	0.1					
3	1	79	6	0.03	1		5	47	34	1.32	6.4	0		3	4	0	0.4	16	0.1					
4	5	79	10	0.15	18		15	48	35	1.26	6.5	0		4	5	0	0.8	16	0.1					
5	23	79	18	0.01	16		35	61	39	1.80	7.3	-5		10	12	0	0.5	14	0.1					
6	21	79		0.6	53		45	46	33	1.41	6.5	-1		5	6	0	0.8	13	0.1					
8	2	79	20	0.08	12		30	61	40	2.30	7.0	-8		12	15	0	0.8	11	0.0	0.0	0.04	0.50	0.10	0.00
9	5	79	21	0.15	24		65	71	47	3.14	7.5	-14		23	28	0	0.7	10	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
----- MILLIGRAMS PER LITER -----																				
9 14 77	0.0	0.00			6.8	0.0	0.00	1.4	3.5		3.4	0.4		5.5	0.02	0.0	4.6		0.0	0.0
10 5 77	0.0	0.00	0.0	0.00	7.4	0.0	0.00	4.0	2.5	0.03	3.7	0.6	0.0	3.7	0.01	0.0	4.5	0.0	0.0	0.0
11 16 77	0.0	0.00			5.4	0.0	0.00	1.4	1.3		2.9	0.2		2.4	0.00	0.0	3.7		0.0	0.0
12 22 77	0.1	0.00			4.1	0.0	0.02	1.0	1.3		2.8	0.1		2.0	0.02	0.0	3.5		0.0	0.0
2 1 78	0.0	0.00	0.0	0.00	2.9	0.0	0.00	0.4	1.6	0.00	1.9	0.1	0.0	1.8	0.04	0.0	2.8	0.0	0.0	0.0
3 1 78	0.0	0.01			3.3	0.0	0.00	0.4	1.2		2.7	0.0		2.0	0.01	0.0	3.0		0.0	0.0
4 4 78	0.1	0.00	0.0	0.00	3.5	0.0	0.00	0.4	1.5	0.04	2.8	0.1	0.0	2.1	0.00	0.0	3.5	0.0	0.0	0.0
4 25 78	0.0	0.00			3.8	0.0	0.00	0.3	1.5		3.0	0.1		2.0	0.00	0.0	3.2		0.1	0.0
5 22 78	0.0	0.01			4.5	0.1	0.00	0.8	1.5		3.0	0.2		1.8	0.00	0.1	3.1		0.3	0.0
6 22 78	0.0	0.01	0.0	0.00	5.4	0.0	0.01	0.5	2.6	0.00	3.2	0.2	0.0	3.0	0.02	0.0	3.3	0.1	0.2	0.0
7 21 78	0.1	0.01			7.0	0.0	0.00	0.1	3.3		3.0	0.2		6.8	0.00	0.0	4.0		0.1	0.0
8 23 78	0.0	0.01			9.0	0.0	0.02	0.6	3.5		4.1	0.2		5.2	0.03	0.0	5.0		0.0	0.0
10 4 78	0.0	0.01	0.0	0.00	7.3	0.0	0.00	1.2	2.6	0.03	3.4	0.3	0.1	2.2	0.01	0.0	4.1	0.0	0.1	0.0
11 20 78	0.0	0.00			8.2	0.0	0.00	1.8	2.8		3.7	0.6		6.7	0.01	0.0	3.9		0.0	0.0
12 27 78	0.1	0.00			4.7	0.0	0.00	0.8	1.5		2.8	0.1		1.6	0.01	0.1	3.6		0.1	0.0
1 30 79	0.0	0.00	0.0	0.00	3.7	0.0	0.01	0.3	1.2	0.03	2.5	0.0	0.0	1.4	0.01	0.0	3.1	0.0	0.0	0.0
3 1 79	0.1	0.01	0.0	0.00	3.3	0.0	0.00	0.1	1.1	0.15	2.6	0.0	0.0	1.3	0.02	0.0	2.9	0.0	0.0	0.0
4 5 79	0.0	0.00	0.0	0.00	3.0	0.1	0.02	0.1	1.3	0.25	2.3	0.0	0.0	1.5	0.05	0.1	3.5	0.0	0.1	0.0
5 23 79	0.0	0.00			4.6	0.0	0.00	0.9	1.6		2.5	0.2		1.6	0.01	0.0	3.4		0.0	0.0
6 21 79	0.1	0.01			3.2	0.0	0.00	0.3	1.2		2.2	0.1		1.0	0.00	0.0	3.6		0.0	0.1
8 2 79	0.0	0.01	0.0	0.00	4.4	0.0	0.00	0.4	1.3	0.03	2.8	0.2	0.0	1.5	0.01	0.0	4.4	0.0	0.1	0.0
9 5 79	0.0	0.02			5.6	0.0	0.00	1.2	1.5		3.6	0.5		1.3	0.02	0.1	3.9		0.1	0.1

TABLE 87. WATER QUALITY FOR SITE 3222 MARTIN COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DTS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
9	14	77	20	0.02			15	456	272	1.40	7.5		30	36	0	1.2	160	0.2					
10	5	77	11	0.1	58		10	438	280	1.62	6.7		35	43	0	0.9	160	0.3					
11	16	77	8	0.1	10		4	362	258	1.23	7.1		30	37	0	2.0	160	0.3					
12	22	77	2	0.2			0	326	230	1.23	7.1		25	30	0	1.6	150	0.3					
2	1	78	0	0.25			40	280	152	1.19	7.3		18	22	0	1.2	93	0.3					
3	1	78	4	0.5			30	310	220	1.12	7.2		16	20	0	1.4	150	0.3					
4	4	78	16	0.3	16		0	380	237	1.33	6.3		18	22	0	1.3	150	0.4					
4	25	78	14	0.2	42*		20	403	258	1.21	7.4		20	25	0	1.2	170	0.1					
5	22	78	18	0.4	36*		2	450	291	1.16	7.5		25	31	0	1.1	190	0.3					
6	22	78	21	0.04				575	366	1.25	7.5		29	35	0	1.4	240	0.3					
7	21	78	22	0.025	21*		15	545	380	1.12	7.8		43	53	0	2.8	250	0.3					
8	23	78	24	0.006	25*		15	481	323	1.52	7.6		44	54	0	1.1	180	0.3					
10	4	78	20	0.04	23*		0	537	401	1.06	7.9		52	63	0	1.4	260	0.2					
11	20	78	11	0.05	2		3	484	284	1.57	7.9	-44	52	63	0	2.1	150	0.2					
12	27	78	2	0.09	7		7	333	182	1.43	7.7	-10	20	25	0	1.2	110	0.2					
1	30	79	2	0.25	6		3	336	203	1.12	6.8	-12	12	15	0	0.5	140	0.3					
3	1	79	6	0.25	15		15	297	186	1.30	7.1	-11	13	16	0	0.8	120	0.3					
4	5	79	11	0.15	35		25	272	163	1.38	7.2		13	16	0	0.9	100	0.3					
5	23	79	17	0.09	19		25	559	379	1.63	7.5		98	119	0	0.6	200	0.2					
6	21	79		0.25	105	0.40	230	257	164	1.21	7.4	-12	17	21	0	0.9	100	0.2					
8	2	79	20	0.06	18	0.06	55	385	189	1.19	7.6	-22	25	31	0	1.1	120	0.2	0.0	0.01	0.45	0.05	0.01
9	5	79	25	0.08	10		20	482	346	1.18	7.6	-30	37	45	0	1.2	220	0.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 14 77	0.1	0.00			36	0.0	0.01	0.1	5.0		31	0.1		7.1	0.03	0.1	3.5		0.1	0.0
10 5 77	0.0	0.00	0.0	0.00	34	0.0	0.00	0.2	4.5	0.10	41	0.4	0.0	6.8	0.01	0.0	3.5	0.2	0.1	0.0
11 16 77	0.0	0.00			30	0.0	0.00	0.1	3.5		29	0.4		5.6	0.00	0.0	3.4		0.0	0.0
12 22 77	0.0	0.00			22	0.0	0.00	0.1	3.2		30	0.4		4.4	0.01	0.0	3.4		0.0	0.0
2 1 78	0.1	0.00	0.0	0.00	15	0.0	0.00	0.4	3.2	0.08	17	0.6	0.0	3.6	0.05	0.0	2.9	0.1	0.0	0.0
3 1 78	0.1	0.02			19	0.1	0.01	0.2	3.0		28	0.5		3.6	0.03	0.1	3.4		0.2	0.0
4 4 78	0.0	0.00	0.0	0.00	23	0.0	0.00	0.2	3.7	0.10	33	0.6	0.0	4.1	0.02	0.0	3.6	0.1	0.1	0.0
4 25 78	0.0	0.00			25	0.0	0.00	0.1	3.6		34	0.3		4.5	0.00	0.0	3.0		0.1	0.0
5 22 78	0.1	0.01			27	0.0	0.00	0.1	3.7		37	0.4		4.6	0.02	0.0	3.7		0.1	0.0
6 22 78	0.1	0.01	0.1	0.00	41	0.1	0.01	0.1	5.9	0.08	46	0.1	0.0	6.5	0.04	0.1	2.9	0.3	0.2	0.0
7 21 78	0.1	0.00			45	0.0	0.00	0.1	6.2		37	0.1		7.3	0.00	0.0	3.4		0.1	0.0
8 23 78	0.1	0.02			47	0.0	0.01	0.1	6.0		37	0.0		8.2	0.04	0.1	4.5		0.1	0.0
10 4 78	0.1	0.01			49	0.0	0.00	0.0	4.4		37	0.0		6.0	0.03	0.0	3.7		0.1	0.0
11 20 78	0.1	0.00			41	0.0	0.02	0.0	4.8		31	0.0		9.3	0.04	0.0	3.6		0.1	0.0
12 27 78	0.1	0.00			22	0.0	0.01	0.2	2.8		24	0.6		3.9	0.02	0.0	2.5		0.1	0.0
1 30 79	0.1	0.01	0.0	0.00	20	0.0	0.00	0.2	2.8	0.20	24	0.7	0.0	2.5	0.05	0.1	3.0	0.1	0.1	0.0
3 1 79	0.0	0.00			19	0.0	0.00	0.1	2.7		26	0.6		2.7	0.02	0.0	2.7		0.0	0.0
4 5 79	0.0	0.00			17	0.0	0.00	0.0	2.6		23	0.4		2.5	0.00	0.0	2.4		0.0	0.0
5 23 79	0.1	0.00			56	0.0	0.03	0.1	4.4		46	0.3		4.5	0.01	0.0	2.4		0.0	0.0
6 21 79	0.1	0.01			17	0.1	0.03	0.2	2.9		19	0.3		2.7	0.04	0.1	3.5		0.1	0.0
8 2 79	0.1	0.00	0.2	0.00	21	0.0	0.03	0.1	3.1	0.10	20	0.5	0.0	2.9	0.00	0.0	3.0	0.1	0.0	0.2
9 5 79	0.0	0.01			43	0.0		0.1	4.7		37	0.2		4.8	0.02	0.0	3.2		0.1	0.0

TABLE 88. WATER QUALITY FOR SITE 3223 MARTIN COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	MEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
9	14	77	18	0.0001			0	162	82	1.61	7.3		17	21	0	0.7	38	0.2					
10	5	77	12	0.007	1		0	150	107	1.33	6.6		19	23	0	1.8	57	0.2					
11	16	77	8	0.02	2		4	150	89	1.50	7.2		19	23	0	1.0	45	0.1					
12	22	77	4	0.025			0	157	95	1.14	7.2		11	14	0	1.2	57	0.2					
2	1	78	1	0.05			20	172	95	1.13	7.1		11	13	0	1.0	57	0.2					
3	1	78	2	0.08			30	151	93	1.24	7.1		12	15	0	1.3	53	0.2					
4	4	78	13	0.05	6		0	151	82	1.48	6.6		11	14	0	0.9	44	0.1					
4	25	78	12	0.04	58*		50	158	91	1.20	7.2		14	17	0	0.9	53	0.1					
5	22	78	16	0.015	37*		2	139	82	1.38	6.9		12	15	0	0.8	43	0.2					
6	22	78	25	0.0000				121	74	1.87	7.3		23	28	0	1.2	30	0.2					
8	23	78	21	0.0009	26*		15	142	91	1.75	7.4		20	24	0	0.2	41	0.1					
10	4	78	18	0.002	57*		3	137	86	1.54	7.5		29	35	0	1.0	38	0.1					
11	20	78	12	0.002	14		7	180	99	1.84	7.7		33	40	0	2.9	41	0.0					
12	27	78	4	0.05	9		5	138	88	1.49	7.2		12	15	0	0.9	44	0.2					
1	30	79	2	0.1	2		1	140	82	1.29	6.8	-3	7	8	0	0.6	48	0.1					
3	1	79	6	0.15	3		4	126	81	1.12	6.9	-4	7	8	0	0.5	50	0.1					
4	5	79	10	0.1	9		3	118	73	1.10	6.9		7	9	0	0.6	44	0.1					
5	23	79	15	0.009	21		25	106	65	1.41	7.2	-4	13	16	0	0.7	32	0.2					
6	21	79		0.06	59		110	75	52	1.24	7.0	-1	10	12	0	0.9	26	0.0					
8	2	79	23	0.015	70	0.01	8	143	77	1.42	7.4	-12	18	22	0	0.8	38	0.1	0.0	0.05	0.45	0.05	0.03
9	5	79	19	0.003	0		20	128	80	1.25	7.1	-6	15	18	0	0.8	43	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MM	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 14 77	0.0	0.03			8.0	0.0	0.00	0.1	2.4		8.9	1.9		3.2	0.01	0.0	3.4		0.0	0.0
10 5 77	0.0	0.00	0.0	0.00	9.9	0.0	0.00	0.6	2.7	0.04	12	0.5	0.0	3.5	0.01	0.0	3.2	0.0	0.0	0.0
11 16 77	0.0	0.00			9.2	0.0	0.00	0.2	2.3		9.8	0.4		2.7	0.00	0.0	3.1		0.0	0.0
12 22 77	0.0	0.00			8.0	0.0	0.00	0.3	1.9		10	0.2		2.4	0.01	0.0	2.9		0.0	0.0
2 1 78	0.1	0.00	0.0	0.00	8.0	0.0	0.00	0.2	2.6	0.04	9.8	0.2	0.0	2.6	0.04	0.0	2.7	0.1	0.0	0.0
3 1 78	0.1	0.02			7.8	0.1	0.01	0.3	2.1		10	0.1		2.8	0.02	0.1	3.0		0.2	0.1
4 4 78	0.0	0.00	0.0	0.00	7.6	0.0	0.00	0.2	2.4	0.08	10	0.1	0.0	2.4	0.01	0.0	3.2	0.0	0.1	0.0
4 25 78	0.1	0.02			7.7	0.0	0.00	0.1	2.1		9.8	0.1		2.5	0.00	0.0	3.0		0.0	0.0
5 22 78	0.0	0.01			7.4	0.0	0.00	0.3	2.1		9.0	0.3		2.6	0.00	0.0	3.5		0.1	0.0
6 22 78	0.1	0.01	0.0	0.00	7.1	0.1	0.01	0.1	3.2	0.00	7.9	0.0	0.0	2.9	0.02	0.1	3.1	0.1	0.3	0.0
8 23 78	0.0	0.01			8.8	0.0	0.01	1.4	3.2		10	0.6		3.3	0.03	0.0	4.3		0.1	0.0
10 4 78	0.0	0.01	0.0	0.01	7.8	0.0	0.00	0.0	2.4	0.06	8.8	0.0	0.0	2.1	0.01	0.0	3.4	0.0	0.0	0.0
11 20 78	0.0	0.00			10	0.0	0.00	0.2	2.5		11	0.3		4.7	0.01	0.0	3.0		0.1	0.0
12 27 78	0.1	0.05			9.6	0.1	0.02	0.4	1.4		9.5	0.3		2.8	0.06	0.1	4.5		0.3	0.2
1 30 79	0.1	0.00	0.0	0.00	8.7	0.0	0.01	0.1	2.0	0.07	9.1	0.1	0.0	2.0	0.02	0.0	3.0	0.0	0.0	0.0
3 1 79	0.0	0.00			7.7	0.0	0.00	0.1	1.8		8.2	0.1		1.7	0.01	0.0	3.1		0.0	0.0
4 5 79	0.0	0.01	0.0	0.00	6.5	0.0	0.00	0.1	2.0	0.20	7.0	0.1	0.0	1.7	0.01	0.0	3.1	0.1	0.0	0.0
5 23 79	0.1	0.00			6.4	0.0	0.00	0.9	1.9		6.2	0.6		2.0	0.01	0.0	3.0		0.0	0.0
6 21 79	0.1	0.01			4.5	0.0	0.00	0.1	1.6		4.4	0.1		1.4	0.01	0.0	3.2		0.0	0.1
8 2 79	0.0	0.01	0.0	0.00	7.6	0.0	0.00	0.3	2.2	0.06	7.6	0.4	0.0	1.9	0.00	0.0	3.5	0.0	0.0	0.0
9 5 79	0.1	0.01			7.0	0.0	0.01	0.2	2.3		7.6	0.1		2.1	0.02	0.0	3.6		0.0	0.0

TABLE 89. WATER QUALITY FOR SITE 3225 MARTIN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
										MILLIGRAMS PER LITER											
9 14 77	20	0.0008			45	385	201	7.58	7.3		117	143	0	11	26	0.2					
9 5 79	23	0.015	32		40	289	174	2.96	8.1	-76	89	107	1	3.7	51	0.1					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 14 77	0.0	0.08			24	0.0	0.00	1.1	14		25	1.0		19	0.02	0.0	3.9		0.0	0.0
9 5 79	0.1	0.06			22	0.0	0.03	0.1	7.8		19	1.5		8.7	0.01	0.1	2.8		0.0	0.0

TABLE 90. WATER QUALITY FOR SITE 3241 MORGAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 7 77	13	0.0000			15	131	65	3.29	6.8		26	32	0	1.1	18						
7 6 77	22	0.004			0	121	70	2.66	6.8		26	32	0	0.4	21	0.0					
8 2 77	20	0.0000			15	133	69	2.81	7.1		29	35	0	1.4	20	0.0					
10 7 77	12	0.015	4		4	134	72	2.68	6.7		25	30	0	1.2	22	0.2					
11 14 77	7	0.04	4		4	96	66	1.47	7.4		16	19	0	0.8	29	0.1					
12 19 77	7	0.04			30	76	50	1.74	7.1		11	13	0	1.1	20	0.1					
2 2 78	1	0.1			25	102	64	1.81	7.2		16	19	0	1.8	21	1.5					
3 2 78	2	0.3			20	87	57	1.66	7.0		11	13	0	1.2	25	0.1					
3 31 78	10	0.25			15	73	45	1.63	7.1		8	10	0	1.0	19	0.0					
4 27 78	14	0.25	8			72	47	1.80	6.9		9	11	0	1.5	17	0.1					
5 19 78	15	0.15	22*		15	79	53	1.77	6.9		11	14	0	1.2	20	0.1					
6 23 78	23	0.0000	71*		80	125	73	3.83	7.7		32	39	0	1.5	16	0.2					
7 20 78	25	0.0000	53*		40	137	83	4.33	7.8		46	56	0	1.0	16	0.1					
8 21 78	24	0.001				95	64	2.16	7.3		25	30	0	0.4	21	0.1					
11 13 78	18	0.0000	11		5	143	77	2.40	7.0		34	41	0	2.1	22	0.2					
12 29 78	3	0.04	8		4	66	46	1.47	7.2	-6	9	11	0	0.8	20	0.0					
1 30 79	2	0.04	2		5	63	35	1.69	6.9		6	7	0	1.5	14	0.0					
3 5 79	8	0.04	12		5	65	46	1.38	6.9	-2	7	8	0	0.5	22	0.0					
4 10 79	10	0.1	9	0.00	5	68	45	1.28	6.8		7	8	0	0.8	21	0.0					
5 21 79	27	0.001	11		5	80	54	1.45	7.2	-6	8	10	0	0.5	26	0.0					
6 26 79	16	0.002	23		8	79	54	1.53	7.4	-6	16	20	0	1.0	22	0.0	0.0	0.01	0.65	0.05	0.01
8 3 79	21	0.01	2		15	85	55	1.54	7.3	-9	16	20	0	0.8	22	0.0	0.0	0.00	0.55	0.15	0.00
9 4 79	22	0.0001	7		10	99	62	2.31	7.6	-20	27	33	0	0.7	19	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	HG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 7 77	0.1	0.00			11	0.0	0.01	0.2	2.0		5.4	0.4		2.5	0.01	0.0	4.3		0.0	0.0
7 6 77	0.0	0.00			11	0.0	0.00	0.1	2.3		5.2	0.3		3.4	0.00	0.0	5.1		0.0	0.0
8 2 77	0.0	0.00			10	0.0	0.01	0.0	2.3		5.9	0.0		3.8	0.03	0.1	3.8		0.2	0.1
10 7 77	0.0	0.00	0.0	0.00	11	0.0	0.00	0.1	3.3	0.04	5.3	0.1	0.0	4.4	0.01	0.0	4.1	0.0	0.0	0.0
11 14 77	0.0	0.00			8.4	0.0	0.00	0.2	1.8		4.1	0.2		2.7	0.00	0.0	4.0		0.0	0.0
12 19 77	0.0	0.00			6.5	0.0	0.00	0.1	1.4		3.8	0.0		2.3	0.00	0.0	3.6		0.0	0.0
2 2 78	0.1	0.00	0.0	0.00	8.8	0.1	0.00	0.1	1.8	0.03	4.1	0.0	0.0	3.0	0.02	0.1	3.0	0.0	0.2	0.0
3 2 78	0.1	0.03			6.9	0.1	0.01	0.1	2.0		4.4	0.0		3.0	0.03	0.1	3.2		0.2	0.0
3 31 78	0.0	0.01			5.4	0.0	0.00	0.0	1.5		3.6	0.0		1.9	0.00	0.0	3.5		0.0	0.0
4 27 78	0.1	0.00	0.0	0.00	5.6	0.0	0.00	0.1	1.6	0.02	3.6	0.0	0.0	1.8	0.01	0.0	4.1	0.0	0.0	0.0
5 19 78	0.0	0.01			6.4	0.1	0.01	0.1	1.7		4.0	0.0		2.3	0.03	0.0	4.2		0.1	0.0
6 23 78	0.0	0.02			12	0.0	0.00	0.1	4.7		5.6	0.4		4.1	0.01	0.0	4.0		0.1	0.0
7 20 78	0.1	0.01	0.0	0.00	13	0.0	0.01	0.1	6.8	0.07	5.4	0.2	0.0	4.3	0.00	0.0	4.1	0.1	0.0	0.0
8 21 78	0.0	0.01			8.9	0.0	0.00	0.1	1.7		4.6	0.0		2.4	0.01	0.0	4.3		0.0	0.0
11 13 78	0.0	0.00			11	0.0	0.01	0.0	2.1		5.3	0.2		3.3	0.01	0.0	4.3		0.1	0.0
12 29 78	0.0	0.00			5.9	0.0	0.00	0.0	1.2		2.9	0.0		2.0	0.00	0.0	3.5		0.0	0.0
1 30 79	0.0	0.00			4.9	0.0	0.00	0.0	1.1		2.5	0.0		1.3	0.01	0.0	3.0		0.1	0.0
3 5 79	0.1	0.00	0.0	0.00	5.7	0.0	0.00	0.1	1.4	0.20	3.1	0.0	0.0	1.7	0.01	0.0	3.2	0.0	0.0	0.0
4 10 79	0.1	0.00	0.0	0.00	4.9	0.1	0.01	0.1	1.2	0.06	2.9	0.0	0.0	1.6	0.04	1.0	3.2	0.0	0.1	0.0
5 21 79	0.0	0.01			6.9	0.0	0.00	0.0	1.4		3.7	0.0		2.2	0.00	0.0	3.9		0.0	0.0
6 26 79	0.0	0.01			6.6	0.0	0.00	0.0	1.3		3.4	0.0		1.8	0.00	0.0	3.9		0.0	0.0
8 3 79	0.0	0.01	0.0	0.00	6.6	0.0	0.00	0.1	1.3	0.02	3.4	0.0	0.0	1.8	0.00	0.0	4.3	0.0	0.0	0.0
9 4 79	0.0	0.02			8.3	0.0	0.00	0.0	1.7		4.5	0.1		2.1	0.03	0.1	4.3		0.1	0.1

TABLE 91. WATER QUALITY FOR SITE 3242 MORGAN COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT SOLID	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L	----- MILLIGRAMS PER LITER -----														
6	3	77	19	0.015			55	278	163	11.1	7.3	127	155	0	2.9	15							
7	6	77	28	0.03			70	308	173	4.99	7.7	110	133	0	2.4	33	0.1						
8	2	77	24	0.02			50	314	159	4.51	8.0	93	113	1	2.9	33	0.7						
10	7	77	12	0.04	37		70	397	222	4.15	7.0	115	140	0	3.4	55	0.3						
11	14	77	6	0.03	30		100	323	183	3.19	7.0	79	96	0	2.8	55	0.4						
12	19	77	7	0.025			0	260	185	2.75	7.6	82	100	0	3.2	58	0.9						

2	1	78	0	0.05			95	255	146	2.22	8.0	47	56	0	1.9	56	1.3						
3	3	78	1	0.2			120	218	132	1.60	7.6	34	42	0	2.1	58	1.1						
3	31	78	12	0.15			4	192	121	1.55	7.7	32	39	0	1.7	54	0.8						
4	27	78	19	1.5	366			155	90	1.49	6.8	15	18	0	1.6	43	0.6						
5	19	78	18	0.4	102*		120	225	129	1.86	7.8	47	57	0	1.4	52	0.5						
6	23	78	21	0.03	55*		45	413	260	3.21	8.4	142	168	3	2.5	75	0.2						
7	20	78	29	0.03	106*		40	414	246	3.29	8.3	126	150	2	2.2	71	0.1						
8	21	78	23	0.002	197*		95	476	274	3.26	8.5	157	184	4	1.6	78	0.1						
10	10	78	17	0.02	60*		55	460	273	2.66	8.3	130	154	2	1.0	94	0.1						
11	13	78	18	0.015	51		10	469	272	3.51	8.2	160	191	2	2.6	71	0.0						
12	29	78	2	0.04	10		7	318	214	1.79	8.2	66	78	1	2.0	93	1.6						

1	30	79	2	0.1	18		6	277	172	1.91	7.8	-44	44	54	0	1.5	78	0.5					
3	5	79	12	0.05	197		140	254	152	1.43	7.7	-31	39	48	0	1.5	75	0.6					
4	10	79	14	0.15	68	0.00	35	229	167	1.78	7.8	68	82	0	1.3	70	0.3						
5	21	79	27	0.03	19		30	385	234	2.28	8.2	-92	98	117	1	1.2	88	0.2					
6	26	79	17	0.02	24		20	321	195	1.97	8.2	-59	70	84	1	2.2	79	0.6	0.0	0.07	1.15	0.10	0.00
8	3	79	20	0.02	10	0.01	25	430	254	1.76	8.3	-95	98	117	1	2.0	110	0.5	0.0	0.07	0.55	0.00	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE		AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	----- MILLIGRAMS PER LITER -----																		
6	3	77	0.1	0.02		29	0.0	0.01	0.1	5.1		18	0.6		9.9	0.01	0.1	2.5		0.4	0.1
7	6	77	0.0	0.01		30	0.0	0.00	0.1	6.1		18	0.8		8.4	0.00	0.0	3.9		0.0	0.1
8	2	77	0.1	0.01		25	0.0	0.02	0.0	6.5		18	0.5		8.0	0.03	0.2	2.6		0.2	0.0
10	7	77	0.0	0.00	0.0	38	0.0	0.00	0.1	5.4	0.15	30	1.6	0.0	11	0.01	0.0	3.4	0.1	0.0	0.0
11	14	77	0.1	0.00		31	0.0	0.00	0.1	4.8		21	2.2		8.6	0.01	0.0	3.9		0.0	0.0
12	19	77	0.2	0.01		26	0.0	0.00	0.8	4.6		21	1.8		7.9	0.01	0.0	4.2		0.0	0.0

2	1	78	0.1	0.00	0.0	18	0.0	0.00	0.3	3.8	0.09	18	1.0	0.0	5.6	0.03	0.1	3.6	0.1	0.2	0.0
3	3	78	0.1	0.04		16	0.0	0.00	0.3	3.8		12	0.6		5.4	0.01	0.0	3.6		0.0	0.0
3	31	78	0.1	0.01		14	0.0	0.00	0.1	3.6		10	0.9		4.4	0.01	0.0	3.8		0.0	0.0
4	27	78	0.1	0.00	0.0	10	0.0	0.00	0.1	3.5	0.05	8.0	0.4	0.0	3.2	0.02	0.0	3.9	0.0	0.0	0.0
5	19	78	0.1	0.01		17	0.0	0.01	0.1	3.6		11	0.7		5.2	0.01	0.0	3.6		0.0	0.0
6	23	78	0.1	0.03		50	0.0	0.00	0.1	4.8		27	1.0		7.4	0.02	0.0	2.9		0.2	0.0
7	20	78	0.2	0.01	0.0	47	0.0	0.01	0.1	8.5	0.15	24	0.3	0.0	10	0.00	0.1	2.5	0.1	0.1	0.0
8	21	78	0.1	0.04		53	0.0	0.01	0.0	5.8		25	0.0		11	0.03	0.1	2.0		0.1	0.0
10	10	78	0.1	0.02	0.0	52	0.0	0.01	0.2	5.4	0.20	25	0.4	0.0	11	0.03	0.1	2.2	0.2	0.2	0.0
11	13	78	0.1	0.00		54	0.0	0.02	0.9	5.4		22	0.7		15	0.02	0.0	2.2		0.1	0.0
12	29	78	0.1	0.01		35	0.0	0.01	0.2	4.6		18	1.1		6.7	0.01	0.0	3.5		0.1	0.0

1	30	79	0.1	0.01	0.0	27	0.0	0.00	0.3	3.3	0.20	19	0.9	0.0	3.8	0.03	0.0	3.4	0.1	0.1	0.0
3	5	79	0.1	0.01		21	0.0	0.01	0.1	4.0		12	0.6		4.4	0.02	0.0	3.2		0.0	0.0
4	10	79	0.1	0.00		19	0.0	0.01	0.2	4.1		17	0.6		4.6	0.03	0.0	3.3		0.1	0.0
5	21	79	0.1	0.02		45	0.0	0.00	0.1	5.3		19	1.2		6.6	0.00	0.0	3.4		0.1	0.0
6	26	79	0.1	0.02		33	0.0	0.01	0.1	4.5		16	0.9		5.1	0.01	0.0	3.9		0.1	0.3
8	3	79	0.1	0.01	0.0	42	0.1		0.1	5.9	0.40	19	0.9	0.0	6.2	0.01	0.1	3.7	0.1	0.0	0.0

TABLE 92. WATER QUALITY FOR SITE 3243 MORGAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PC
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UN/CM	MG/L							MILLIGRAMS PER LITER							
6 3 77	22	0.015			15	1310	959	0.99	7.8		111	134	1	1.1	660					
7 6 77	22	0.006			4	1120	846	1.25	8.0		142	170	1	1.1	530	0.0				
8 2 77	22	0.005			20	1020	715	1.20	8.0		128	154	1	1.2	450	0.0				
10 7 77	12	0.2	16		140	986	737	1.41	7.6		113	137	0	2.4	450	0.0				
11 14 77	5	0.02	7		4	1060	821	1.40	8.1		108	129	1	2.3	500	0.1				
12 19 77	6	0.02			10	1090	868	1.21	7.8		69	83	0	1.6	580	0.4				
8 21 78	22	0.001	12		10	1090	747	1.27	8.2		151	180	2	1.2	450	0.0				
10 10 78	16	0.0001	264		6	723	553	1.40	8.3		116	137	2	1.1	320	0.3				
11 13 78	18	0.005	3		7	660	416	1.55	8.1	-86	88	105	1	2.7	220	0.2				
12 29 78	4	0.007	5		5	961	679	1.33	7.8	-82	98	119	1	1.7	420	0.5				
1 30 79	2	0.03	4		2	624	465	1.24	7.8	-40	41	50	0	1.9	300	1.1				
3 5 79	7	0.03	13		6	620	445	1.21	7.8	-39	44	54	0	1.4	290	1.3				
4 10 79	8	0.02	28	0.00	1	709	485	1.42	8.0		61	74	1	1.3	300	0.4				
5 21 79	20	0.004	50	0.35	15	1030	715	1.30	8.2		115	137	2	0.7	440	0.1				
6 26 79	17	0.002	19		15	841	505	1.57	8.2	-100	107	128	1	0.9	280	0.1	0.0	0.01	1.30	0.10
8 3 79	20	0.03	41	0.02	30	1030	661	1.28	8.4		139	163	3	1.2	390	0.0	0.0	0.03	0.55	0.00
8 6 79						998	663	1.41	8.5	-120	129	150	3	0.8	390	0.1	0.0	0.03		
9 4 79	24	0.004	2		45	925	591	1.38	7.9	-120	141	170	1	1.4	330	0.9				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI
MO DA YR	MILLIGRAMS PER LITER																		
6 3 77	0.2	0.05			120	0.0	0.02	0.1	5.3		83	0.4		13	0.04	0.1	1.5		0.3
7 6 77	0.2	0.05			130	0.0	0.00	0.1	6.4		80	0.1		15	0.02	0.1	1.1		0.0
8 2 77	0.1	0.05			100	0.0	0.00	0.1	5.8		68	0.1		13	0.02	0.1			0.1
10 7 77	0.2	0.11	0.0	0.00	120	0.0	0.00	0.1	6.0	0.35	82	0.2	0.0	12	0.05	0.1	1.5	0.4	0.2
11 14 77	0.2	0.05			140	0.0	0.00	0.1	6.1		86	0.6		12	0.02	0.0	1.5		0.1
12 19 77	0.1	0.03			130	0.0	0.00	0.1	5.6		91	0.3		10	0.03	0.0	1.6		0.2
8 21 78	0.2	0.06			110	0.0	0.00	0.1	5.6		70	0.1		11	0.04	0.2	1.9		0.2
10 10 78	0.3	0.00	0.0	0.00	85	0.0	0.00	0.0	5.3	0.30	51	0.0	0.0	15	0.03	0.1	3.9	0.3	0.0
11 13 78	0.1	0.00			67	0.1	0.03	0.0	4.2		36	0.0		20	0.05	0.1	3.9		0.0
12 29 78	0.2	0.02			110	0.0	0.01	0.1	4.6		69	0.4		8.9	0.04	0.1	2.2		0.0
1 30 79	0.1	0.00			79	0.0	0.01	0.1	3.6		43	0.1		7.1	0.03	0.1	1.8		0.0
3 5 79	0.1	0.03			72	0.0	0.00	0.1	3.0		42	0.1		4.4	0.02	0.1	1.8		0.0
4 10 79	0.1	0.02			87	0.0	0.00	0.0	3.2		50	0.0		6.2	0.02	0.1	1.2		0.0
5 21 79	0.2	0.03			110	0.0	0.02	0.2	4.6		71	0.4		9.5	0.03	0.1	1.8		0.0
6 26 79	0.1	0.04			81	0.1	0.05	0.0	4.5		57	0.4		8.8	0.00	0.1	2.7		0.0
8 3 79	0.2	0.05	0.0	0.00	100	0.0	0.01	0.0	4.4	0.45	60	0.6	0.0	7.9	0.02	0.1	2.8	0.2	0.0
8 6 79	0.2	0.05			110	0.0	0.02	0.0	5.1		63	0.6		9.2	0.02	0.1	3.1		0.0
9 4 79	0.1	0.04			93	0.1	0.05	0.0	5.0		55	0.2		9.0	0.02	0.2	1.8		0.0

TABLE 93. WATER QUALITY FOR SITE 3246 MORGAN COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NO3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
										----- MILLIGRAMS PER LITER -----											
2 2 78	2	0.07			60	322	183	1.74	8.0			42	50	0	1.3	93	0.3				
3 2 78	2	0.25			30	373	232	1.73	7.7			55	47	0	1.9	120	0.2				
3 31 78	10	0.15			50	378	223	1.54	7.8			36	44	0	1.4	130	0.2				
4 27 78	13	0.2	89			297	181	1.56	7.1			35	43	0	1.4	98	0.3				
5 19 78	14	0.1	17*		55	338	184	1.75	7.7			40	49	0	1.2	95	0.1				
6 23 78	22	0.009	42*		4	314	205	1.85	7.9			54	65	0	1.4	100	0.2				
7 20 78	24	0.04	26*		20	372	234	1.53	7.8			43	52	0	1.5	130	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
2 2 78	0.1	0.00	0.1	0.00	23	0.1	0.00	0.1	3.2	0.40	24	0.1	0.0	6.2	0.03	0.1	2.4	0.4	0.1	0.0
3 2 78	0.1	0.05			28	0.0	0.00	0.1	3.5		30	0.5		8.6	0.02	0.0	2.6		0.0	0.0
3 31 78	0.1	0.02			27	0.0	0.00	0.1	3.6		29	0.4		6.1	0.01	0.0	2.7		0.0	0.0
4 27 78	0.1	0.00	0.0	0.00	22	0.0	0.00	0.2	3.3	0.10	23	0.3	0.0	4.7	0.01	0.0	2.5	0.1	0.0	0.0
5 19 78	0.1	0.02			24	0.0	0.00	0.2	3.2		24	0.2		5.8	0.01	0.0	2.6		0.0	0.0
6 23 78	0.0	0.03			33	0.0	0.00	0.0	3.5		23	0.0		5.6	0.01	0.0	2.5		0.3	0.0
7 20 78	0.1	0.02	0.0	0.00	35	0.0	0.00	0.1	4.4	0.10	26	0.2	0.0	5.8	0.00	0.0	2.6	0.1	0.0	0.0

TABLE 94. WATER QUALITY FOR SITE 3251 OWSLEY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT SOLID	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L					MILLIGRAMS PER LITER									
7 5 77	18	0.006			15	80	49	2.85	7.2		25	30	0	0.8	12	0.0				
7 28 77	24	0.002			15	89	49	3.42	7.3		25	30	0	0.7	11	0.1				
8 22 77	21	0.015			20	82	51	2.21	7.3		17	21	0	0.6	16	0.1				
9 26 77	20	0.01			20	84	53	2.63	6.9		17	21	0	0.8	15	0.3				
10 31 77	13	0.04	14		0	102	57	2.02	6.3		16	19	0	1.0	20	0.0				
11 25 77	7	0.15	8		10	78	49	2.00	7.2		14	17	0	0.5	17	0.2				
12 19 77	6	0.06			0	68	45	1.90	6.5		7	8	0	1.0	17	0.2				
1 23 78	0	0.2			15	75	44	1.90	6.9		7	9	0	0.7	16	0.3				
3 6 78	4	0.07			15	62	41	1.79	6.9		8	10	0	1.1	16	0.1				
4 17 78	17	0.01	32		8		54	1.77	7.5		13	16	0	1.4	20	0.1				
5 13 78	16	0.1	51*		35	62	42	1.70	6.8		10	12	0	1.0	15	0.2				
8 14 78		0.007			15	87	54	3.63	7.4		24	29	0	0.4	11	0.2				
12 6 78	6	0.005	10		5	65	39	1.93	6.4		8	10	0	0.8	13	0.2				
2 13 79		0.07	3		6	57	33	1.71	6.6	-4	6	7	0	0.7	13	0.1				
3 14 79	5	0.08	7		7	58	40	1.34	6.7	-2	7	8	0	0.9	18	0.1				
4 16 79	11	0.2	20		35	54	42	1.42	7.1	-4	7	9	0	0.7	18	0.1				
5 14 79	15	0.04	6		15	65	46	1.81	7.3	-8	11	14	0	0.6	17	0.1				
7 17 79	20	0.025	32*		20	77	54	2.00	7.5	-12	17	21	0	0.6	18	0.1	0.0	0.05	1.20	0.35 0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 5 77	0.0	0.00			4.3	0.0	0.00	0.0	1.5		3.9	0.0		3.6	0.00	0.0	3.7		0.0	0.0
7 28 77	0.0	0.01			4.6	0.0	0.00	0.0	1.8		4.4	0.0		3.9	0.00	0.0	3.5		0.0	0.0
8 22 77	0.0	0.01			4.4	0.0	0.00	0.0	1.9		4.1	0.0		3.6	0.02	0.0	4.6		0.0	0.0
9 26 77	0.0				4.8	0.0	0.00	0.1	2.2		4.9	0.0		3.7	0.05	0.0	4.3		0.1	0.0
10 31 77	0.0	0.02	0.0	0.00	5.2	0.0	0.00	0.0	2.1	0.04	4.7	0.0	0.0	4.3	0.01	0.0	4.6	0.0	0.0	0.0
11 25 77	0.0	0.00			4.4	0.0	0.00	0.0	1.3		4.0	0.0		3.2	0.00	0.0	4.4		0.0	0.0
12 19 77	0.0	0.00			3.8	0.0	0.00	0.1	1.5		4.1	0.0		3.4	0.00	0.0	4.1		0.0	0.0
1 23 78	0.1		0.0	0.00	3.6	0.0	0.00	0.1	1.3	0.00	4.0	0.1	0.0	3.3	0.01	0.0	3.9	0.0	0.0	0.0
3 6 78	0.0	0.01			3.2	0.0	0.00	0.1	1.2		3.6	0.0		3.0	0.00	0.0	3.8		0.0	0.0
4 17 78	0.1	0.00	0.0	0.00	4.4	0.0	0.00	0.0	1.5	0.01	4.7	0.1	0.0	3.5	0.01	0.0	4.1	0.0	0.1	0.0
5 13 78	0.0	0.00	0.0	0.00	3.1	0.0	0.00	0.0	1.2	0.06	3.3	0.0	0.0	2.5	0.00	0.0	4.1	0.0	0.0	0.0
8 14 78	0.0	0.01			5.5	0.0	0.01	0.1	2.0		4.8	0.0		3.6	0.02	0.0	5.2		0.0	0.0
12 6 78	0.1	0.00			3.5	0.0	0.01	0.1	1.4		3.0	0.0		2.7	0.02	0.0	3.7		0.0	0.0
2 13 79	0.1	0.00	0.0	0.00	2.8	0.0	0.00	0.1	0.9	0.03	3.0	0.0	0.0	1.9	0.01	0.0	3.1	0.0	0.0	0.0
3 14 79	0.0	0.00			3.1	0.0	0.00	0.1	1.1		3.1	0.0		2.1	0.01	0.0	3.4		0.1	0.0
4 16 79	0.1	0.01	0.0	0.00	3.1	0.0	0.00	0.1	1.2	0.00	3.3	0.0	0.0	2.3	0.01	0.0	3.8	0.0	0.1	0.0
5 14 79	0.0	0.00			4.2	0.1	0.03	0.2	1.5		3.6	0.0		2.7	0.03	0.0	4.2		0.0	0.0
7 17 79	0.0	0.01	0.0	0.00	4.7	0.0	0.05	0.0	2.1	0.05	4.0	0.0	0.0	3.5	0.04	0.1	4.6	0.0	0.1	0.0

TABLE 95. WATER QUALITY FOR SITE 3252 OWSLEY COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
7	28	77	23	0.03			150	392	215	1.74	7.7		45	55	0	3.7	110	0.2					
8	22	77	22	0.07				323	176	1.63	7.1		25	30	0	1.6	95	0.2					
9	26	77	21	0.4			490	924	610	1.08	5.9		6	7	0	1.0	440	0.9					
10	31	77	14	0.09	31		4	272	149	1.92	6.0		34	42	0	1.7	70	0.0					
11	25	77	7	0.25	14		30	172	105	1.46	7.5		20	24	0	1.1	54	0.1					
12	19	77	7	0.25			80	268	175	1.70	7.7		26	32	0	1.6	89	1.5					
1	23	78	0	0.8			45	246	151	1.76	7.5		22	27	0	0.9	80	0.3					
3	6	78	5	0.4			210	261	163	1.52	7.4		24	29	0	1.4	92	0.3					
4	17	78	17	0.2	33		30	343	203	1.75	7.1		37	45	0	2.2	110	0.1					
5	13	78	18	0.4	339*		280	310	210	1.03	7.3		19	23	0	1.3	140	0.4					
6	15	78	16	0.025				408	272	1.37	7.7		49	60	0	2.0	160	0.1					
7	13	78	19	0.06			260	362	216	1.56	7.9		32	39	0	2.7	120	0.1					
8	14	78	25	0.04	153*		250	515	320	1.22	7.6		37	45	0	2.2	200	0.5					
9	28	78	17	0.007	41*		45	517	326	1.19	7.8	-49	61	74	0	3.4	190	0.1					
11	2	78	12	0.005	23*		4	596	426	1.09	7.8	-53	53	64	0	2.9	280	0.0					
12	6	78	4	0.02	74		170	367	232	1.29	7.1		21	26	0	1.0	140	0.2					
2	13	79		0.25	14		7	498	349	1.09	7.3	-22	24	29	0	1.7	240	0.3					
3	14	79	6	0.5	52		65	407	299	1.19	7.4	-18	21	26	0	2.1	200	0.1					
4	16	79	12	1.0	21		40	347	241	1.19	7.3	-16	20	25	0	1.0	160	0.3					
5	14	79	17	0.3	13		25	460	296	1.30	7.8	-29	20	24	0	1.0	190	0.1					
7	17	79	22	0.5	68*		180	658		7.6			21	26	0	1.3		0.4	0.1	0.04	1.65	0.50	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 28 77	0.0	0.01			24	0.0	0.00	0.0	3.6		22	0.0		21	0.00	0.0	2.1		0.0	0.0
8 22 77	0.1	0.01			19	0.0	0.00	0.2	3.3		22	0.2		11	0.02	0.0	4.0		0.0	0.0
9 26 77	0.1				69	0.1	0.00	0.2	5.4		72	5.7		7.4		0.1	3.0		0.1	0.2
10 31 77	0.1	0.02	0.0	0.00	15	0.0	0.00	0.1	2.9	0.06	18	0.0	0.0	12	0.02	0.0	4.0	0.1	0.0	0.0
11 25 77	0.1	0.01			11	0.0	0.00	0.1	1.6		9.8	0.4		6.2	0.00	0.0	3.8		0.0	0.0
12 19 77	0.1	0.00			17	0.0	0.01	0.1	2.5		24	0.4		9.5	0.01	0.0	3.6		0.1	0.0
1 23 78	0.2	0.02	0.0	0.00	15	0.0	0.00	0.1	2.9	0.00	22	0.4	0.0	7.4	0.02	0.0	3.6	0.1	0.0	0.0
3 6 78	0.1	0.00			16	0.0	0.00	0.1	2.0		22	0.5		6.8	0.01	0.0	3.4		0.0	0.0
4 17 78	0.1	0.00	0.0	0.00	20	0.0	0.00	0.1	2.9	0.10	28	0.2	0.0	13	0.02	0.0	3.1	0.1	0.1	0.0
5 13 78	0.1	0.01	0.0	0.00	18	0.0	0.00	0.1	2.3	0.09	22	0.7	0.0	5.8	0.01	0.0	3.6	0.1	0.0	0.0
6 15 78	0.1	0.02	0.0	0.00	24	0.1	0.00	0.1	3.3	0.00	32	0.0	0.0	16	0.03	0.1	3.3	0.2	0.3	0.0
7 13 78	0.1	0.02			20	0.0	0.00	0.0	3.5		24	0.0		20	0.00	0.1	2.8		0.1	0.0
8 14 78	0.2	0.01			35	0.0	0.01	0.4	4.7		31	0.6		17	0.03	0.1	3.0		0.1	0.0
9 28 78	0.1	0.03	0.0	0.00	33	0.0	0.01	0.1	3.8	0.20	29	0.1	0.0	18	0.05	0.2	2.8	0.2	0.2	0.0
11 2 78	0.1	0.02	0.0	0.00	43	0.0	0.01	0.1	4.3	0.45	36	0.1	0.0	26	0.02	0.0	2.6	0.2	0.1	0.0
12 6 78	0.2	0.01			30	0.0	0.01	0.3	2.6		25	1.3		7.1	0.03	0.0	3.0		0.1	0.0
2 13 79	0.1	0.00	0.0	0.00	40	0.0	0.01	0.1	2.3	0.15	36	0.8	0.0	8.9	0.04	0.0	2.8	0.2	0.1	0.0
3 14 79	0.1	0.00			35	0.0	0.00	0.1	2.4		34	0.5		7.9	0.02	0.0	3.2		0.1	0.0
4 16 79	0.1	0.00	0.0	0.00	22	0.1	0.02	0.0	2.1	0.10	31	0.3	0.0	5.7	0.03	0.0	3.0	0.1	0.1	0.2
5 14 79	0.1	0.01			37	0.0	0.01	0.0	3.0		35	0.2		10	0.02	0.0	2.6		0.1	0.0
7 17 79	0.2	0.02	0.0	0.00	51	0.1	0.03	0.0	5.2	0.25	44	1.5	0.0	10	0.08	0.1	3.2	0.2	0.2	0.0

TABLE 96. WATER QUALITY FOR SITE 3253 OWSLEY COUNTY, KENTUCKY

DATE		WATER EST		SUSP	SETT	SPEC		DIS	NEUT	LAB	ACID-	ALKA-	NO3		*NO3	NH3	TOT	TOT	ORTH				
		TEMP	DISCH	SOL	MATTER	TURB	COND	SOLID	RATIO	PH	ITY	LINITY	HCO3	CO3	CL	SD4	AS N	AS N	AS N	N	P	PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
5	25	77	18	0.03			10	182	131	1.85	6.7		26	32	0	1.4	66	0.1					
7	5	77	19	0.007			10	297	160	1.36	6.9		22	27	0	1.2	93	0.6					
7	28	77	22	0.007			10	257	149	1.40	7.2		28	34	0	0.8	84	0.0					
8	22	77	22	0.006			8	265	146	1.58	7.1		24	29	0	0.7	80	0.1					
9	26	77	20	0.01			20	308	169	1.53	7.0		20	24	0	0.8	96	0.1					
10	31	77	12	0.025	6		0	391	171	1.59	6.7		16	20	0	1.0	98	0.0					
11	25	77	8	0.05	6		20	255	176	1.17	7.4		17	21	0	5.0	110	0.1					
12	19	77	8	0.03			0	298	163	1.51	6.8		18	22	0	1.2	96	0.1					
1	23	78	0	0.3			10	187	103	1.39	7.0		11	13	0	1.9	56	0.4					
3	6	78	2	0.02			15	181	101	1.30	7.1		12	15	0	2.6	55	0.3					
4	17	78	18	0.02	24		4	269	180	1.42	7.4		15	18	0	1.6	110	0.1					
5	13	78	17	0.1	47*		40	151	96	1.17	7.2		11	13	0	1.5	54	0.3					
6	15	78	21	0.01				229	153	1.39	7.2		19	23	0	1.2	89	0.1					
7	13	78	18	0.006	40*		20	209	129	1.76	7.5		30	37	0	0.7	64	0.1					
8	14	78	22	0.003	18*		20	272	155	1.23	7.3		17	21	0	0.5	95	0.1					
9	28	78	17	0.0003	17*		15	253	144		7.5		23	28	0		82	0.1					
11	2	78	13	0.0004	14		3	250	142	1.22	7.5	-15	20	24	0	0.7	86	0.0					
12	6	78	5	0.01	19		15	268	150	1.31	7.2		20	25	0	0.8	90	0.0					
2	13	79		0.08	4		3	252	153	1.29	7.0	-6	12	15	0	0.6	96	0.0					
3	14	79	5	0.05	18		5	241	156	1.31	7.0	-6	10	12	0	0.6	100	0.0					
4	16	79	13	0.15	12		25	230	130	1.27	7.4	-12	13	16	0	0.7	79	0.1					
5	14	79	18	0.08	8		15	241	171	1.22	7.4		13	16	0	0.6	110	0.1					
7	17	79	21	0.01	13		65	269	157	1.35	7.4	-17	20	24	0	0.7	94	0.1	0.1	0.02	0.00	0.15	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 25 77	0.0	0.00			14	0.0	0.01	0.0	1.7		20	0.1		5.7	0.02	0.0	2.9		0.0	0.0
7 5 77	0.0	0.00			14	0.0	0.01	0.0	2.0		21	0.0		5.2	0.01	0.1	3.0		0.0	0.0
7 28 77	0.0	0.01			14	0.0	0.00	0.1	1.9		18	0.1		5.3	0.00	0.0	3.5		0.0	0.0
8 22 77	0.0	0.00			15	0.0	0.00	0.0	2.4		19	0.0		5.1	0.02	0.0	4.0		0.0	0.0
9 26 77	0.1				15	0.1	0.00	0.2	3.7		25	0.2		5.1		0.1	4.6		0.1	0.1
10 31 77	0.0	0.01	0.0	0.00	18	0.0	0.00	0.1	2.3	0.08	25	0.1	0.0	6.7	0.02	0.0	4.4	0.1	0.0	0.0
11 25 77	0.0	0.00			16	0.0	0.00	0.1	1.6		21	0.0		4.9	0.00	0.0	3.7		0.0	0.0
12 19 77	0.0	0.00			15	0.0	0.01	0.1	1.5		25	0.0		4.6	0.02	0.0	3.4		0.2	0.0
1 23 78	0.1	0.03	0.0	0.00	11	0.0	0.00	0.1	1.6	0.00	11	0.2	0.0	4.7	0.02	0.0	4.2	0.1	0.0	0.0
3 6 78	0.0	0.00			10	0.0	0.00	0.0	1.6		10.0	0.2		4.6	0.00	0.0	3.6		0.0	0.0
4 17 78	0.8	0.00	0.0	0.00	16	0.0	0.01	0.8	2.7	0.08	26	0.4	0.0	5.6	0.02	0.0	3.9	0.1	0.1	0.0
5 13 78	0.1	0.00	0.0	0.00	9.0	0.0	0.00	0.1	1.6	0.07	8.9	0.4	0.0	3.6	0.02	0.0	4.2	0.0	0.0	0.0
6 15 78	0.1	0.01	0.0	0.00	12	0.1	0.01	0.1	2.2	0.00	21	0.0	0.0	5.4	0.03	0.1	4.2	0.1	0.4	0.0
7 13 78	0.1	0.01			12	0.0	0.00	0.2	2.0		19	0.0		4.0	0.00	0.1	3.6		0.1	0.0
8 14 78	0.0	0.01			15	0.0	0.00	0.1	2.2		18	0.0		4.6	0.02	0.0	3.9		0.1	0.0
9 28 78	0.1	0.01	0.0	0.00	15	0.0	0.00	0.1	2.1	0.15	17	0.1	0.0	4.4	0.01	0.0	3.8	0.1	0.0	0.0
11 2 78	0.0	0.00			13	0.0	0.01	0.1	1.8		16	0.1		4.5	0.02	0.0	3.3		0.0	0.0
12 6 78	0.1	0.00			15	0.0	0.01	0.0	1.6		18	0.1		4.3	0.04	0.1	3.2		0.1	0.0
2 13 79	0.1	0.00	0.0	0.00	16	0.0	0.02	0.0	1.7	0.10	18	0.0	0.0	5.6	0.02	0.0	3.2	0.0	0.0	0.0
3 14 79	0.2	0.00			14	0.0	0.00	0.2	1.3		22	0.0		3.7	0.01	0.0	3.4		0.1	0.0
4 16 79	0.0	0.01	0.0	0.00	13	0.0	0.01	0.0	1.6	0.10	15	0.0	0.0	3.3	0.01	0.0	3.7	0.0	0.0	0.0
5 14 79	0.1	0.01			16	0.0	0.00	0.0	1.7		22	0.0		3.9	0.03	0.0	3.5		0.1	0.0
7 17 79	0.0	0.01			15	0.0	0.00	0.1	1.9		20	0.1		4.3	0.01	0.1	3.9		0.0	0.0

TABLE 97. WATER QUALITY FOR SITE 3261 PERRY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
MILLIGRAMS PER LITER																					
6 28 77	19	0.3			100	52	37	1.44	6.4			10	12	0	1.3	12	0.8				
7 26 77	22	0.007			25	77	45	2.72	7.2			20	24	0	1.7	11	0.0				
8 23 77	21	0.004			8	72	42	2.16	7.4			9	11	0	1.5	14	0.1				
9 27 77	20	0.004			40	105	62	4.17	7.0			27	33	0	4.7	10	0.2				
10 25 77	12	0.02			20	64	56	1.74	6.5			12	15	0	1.5	22	0.0				
11 28 77	7	0.9	7		15	32	32	1.49	6.9			5	6	0	0.8	12	0.1				
12 20 77	8	0.09			4	42	36	1.32	6.9			5	6	0	1.2	16	0.1				
1 24 78	2	2.0			8	47	32	1.69	6.4			4	5	0	0.7	13	0.1				
3 7 78	4	0.7			15	41	30	1.22	6.5			4	5	0	1.1	14	0.1				
4 18 78	12	0.25	23		20	53	56	1.40	6.8			7	8	0	1.5	26	0.1				
5 16 78	18	0.15	28*		15	40	41	1.03	6.6			5	6	0	1.0	20	0.2				
6 14 78	20	0.015				51	36	1.94	6.9			11	14	0	1.2	11	0.1				
7 12 78	22	0.0000	55*		30	70	50	3.65	7.3			22	27	0	2.7	9	0.1				
8 15 78	22	0.0015	35*		10	63	50	2.49	7.1			16	20	0	0.8	15	0.0				
12 7 78	7	0.02	12		10	41	28	1.64	6.8			5	6	0	0.7	10	0.1				
1 18 79	2	0.04	8		4	35	31	1.25	6.0			3	4	0	0.7	13	0.1				
3 15 79	6	0.015	4		2	36	24	1.33	6.5	1		2	3	0	0.9	10	0.0				
4 11 79	9	0.04	16	0.00	15	34	28	1.32	6.5			3	4	0	0.8	12	0.0				
5 16 79	12	0.002	9		8	40	30	1.36	6.7	0		3	4	0	0.8	12	0.2				
6 5 79	16	0.01	28		30	37	36	1.45	6.8	1		9	11	0	1.0	12	0.1				
7 7 79	17	0.0000	10		8	62	45	2.80	7.4	-10		16	19	0	2.3	11	0.0 0.0	0.02	0.70	0.00	0.00
7 30 79	21	0.0006	13		20	59	38	2.49	7.2	-8		13	16	0	1.1	10	0.0 0.0	0.02	0.60	0.10	0.00
11 1 79	14	0.007	0		15	54	38	2.13	7.2	-10		12	15	0	1.4	11	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 28 77	0.1	0.00			3.0	0.0	0.00	0.1	1.5		2.3	0.0		2.0	0.01	0.0	2.0		0.0	0.0
7 26 77	0.0	0.00			4.0	0.0	0.00	0.0	1.7		2.8	0.0		4.4	0.00	0.0	3.6		0.0	0.0
8 23 77	0.0	0.00			4.1	0.0	0.01	0.0	1.9		3.0	0.0		3.7	0.02	0.0	3.9		0.0	0.0
9 27 77	0.1	0.01			6.6	0.0	0.00	0.1	2.9		4.2	0.0		7.0	0.01	0.0	4.1		0.0	0.0
10 25 77	0.1	0.01	0.0	0.00	6.1	0.0	0.00	0.3	2.3	0.03	3.9	0.0	0.0	4.1	0.01	0.0	3.6	0.0	0.0	0.0
11 28 77	0.1	0.00			2.9	0.0	0.00	0.1	1.0		2.1	0.0		1.8	0.00	0.0	3.3		0.0	0.0
12 20 77	0.1	0.00			3.0	0.0	0.00	0.1	1.1		2.5	0.0		1.9	0.01	0.0	3.4		0.0	0.0
1 24 78	0.1	0.03	0.0	0.00	3.1	0.0	0.00	0.2	1.2	0.00	2.6	0.0	0.0	1.9	0.01	0.0	3.1	0.0	0.0	0.0
3 7 78	0.0	0.00			2.4	0.0	0.00	0.0	0.9		2.1	0.0		1.7	0.00	0.0	2.7		0.0	0.0
4 18 78	0.5	0.00	0.0	0.00	6.2	0.0	0.00	0.6	1.3	0.03	4.4	0.1	0.0	2.4	0.01	0.0	3.6	0.0	0.0	0.0
5 16 78	0.1	0.01			3.4	0.0	0.00	0.1	1.1		2.4	0.0		1.6	0.01	0.0	3.3		0.0	0.0
6 14 78	0.0	0.00	0.0	0.00	2.8	0.0	0.00	0.0	1.6	0.00	2.1	0.0	0.0	3.0	0.00	0.0	3.3	0.0	0.0	0.0
7 12 78	0.0	0.01	0.0	0.00	5.6	0.0	0.00	0.1	1.9	0.04	3.6	0.0	0.0	3.7	0.00	0.0	4.2	0.0	0.0	0.0
8 15 78	0.1	0.00			6.1	0.0	0.01	0.1	1.7		3.4	0.0		3.7	0.01	0.0	4.1		0.0	0.0
12 7 78	0.1	0.00			2.5	0.0	0.00	0.1	1.1		1.6	0.0		2.1	0.00	0.0	2.8		0.0	0.0
1 18 79	0.1	0.00	0.3	0.00	2.6	0.0	0.00	0.1	1.1	0.04	1.8	0.0	0.0	1.6	0.01	0.0	3.1	0.0	0.0	0.4
3 15 79	0.0	0.00			2.1	0.0	0.00	0.0	0.9		1.4	0.0		1.3	0.00	0.0	2.9		0.0	0.0
4 11 79	0.1	0.00	0.1	0.00	2.3	0.0	0.00	0.1	1.0	0.03	1.8	0.0	0.0	1.4	0.00	0.0	3.1	0.0	0.0	0.1
5 16 79	0.0	0.00			2.7	0.0	0.00	0.0	1.1		1.9	0.0		1.6	0.01	0.0	3.4		0.0	0.0
6 5 79	0.2	0.00			2.6	0.0	0.02	0.2	1.7		1.6	0.0		2.2	0.00	0.0	4.0		0.0	0.0
7 7 79	0.0	0.00			5.4	0.0	0.01	0.1	2.0		3.2	0.0		3.1	0.00	0.0	4.0		0.0	0.0
7 30 79	0.0	0.00			3.6	0.0	0.00	0.0	1.4		2.5	0.0		3.0	0.01	0.0	4.1		0.0	0.0
11 1 79	0.1	0.02			3.3	0.1	0.04	0.0	2.0		2.1	0.0		3.3		0.0	3.1		0.1	0.1

TABLE 9B. WATER QUALITY FOR SITE 3262 PERRY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UH/CM	MG/L							MILLIGRAMS PER LITER								
1 23 78	0	1.5			250	371	231	1.52	7.5			33	40	0	1.9	130	0.4					
3 7 78	3	0.25			55	366	212	1.50	7.6			35	43	0	2.3	120	0.8					
4 18 78	4	0.25	605		3100	515	305	1.52	7.6			35	43	0	4.1	170	0.7					
5 16 78	17	0.5	104*		95	344	223	1.10	7.6			28	34	0	2.6	140	0.7					
6 14 78	21	0.025				450	288	1.34	7.8			59	71	0	2.6	160	0.3					
7 12 78	20	0.15	486*		550	320	203	1.65	7.7			46	56	0	2.6	100	0.6					
8 15 78	21	0.08	36*		490	331	247	0.89	7.2			12	15	0	1.8	170	2.0					
9 28 78	17	0.0005	20*		50	494	308	2.72	8.5			166	194	4	5.3	94	0.3					
11 6 78	11	0.0008	35		50	523	360	2.17	8.1			130	155	1	4.6	150	0.2					
12 7 78	5	0.03	145		310	304	213	1.49	7.6			35	43	0	1.8	120	0.3					
1 18 79	3	0.03	14		20	381	263	1.27	7.4			30	36	0	1.9	160	0.4					
3 15 79	7	0.006	34		25	363	251	1.27	7.0	-20		21	26	0	1.8	160	0.2					
4 11 79	13	0.01	51	0.00	65	316	222	1.37	7.5	-25		26	32	0	1.7	130	0.2					
5 16 79	13	0.002	51		80	380	270	1.28	7.9	-33		39	48	0	2.3	150	1.2					
6 6 79	16	0.01	126	0.60	370	278	242	1.12	7.6	-16		31	38	0	2.2	150	0.3					
7 7 79	18	0.007	107*		190	390	276	1.45	8.1	-59		59	71	1	3.8	150	0.2	0.4	0.04	0.65	0.30	0.01
7 31 79	21	0.015	194	2.0	650	330	209	1.36	8.0	-38		50	60	0	3.4	110	0.3	0.1	0.09	1.15	0.10	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 23 78	0.6		0.0	0.00	30	0.0	0.00	0.6	3.2	0.09	29	0.4	0.0	4.8	0.03	0.0	3.8	0.3	0.0	0.0
3 7 78	0.1	0.00			29	0.0	0.00	0.0	3.0		25	0.4		4.6	0.01	0.0	3.3		0.0	0.0
4 18 78	0.2	0.00	0.0	0.00	49	0.0	0.01	0.2	3.7	0.25	35	0.3	0.0	6.2	0.01	0.0	4.1	0.3	0.0	0.0
5 16 78	0.1	0.01			26	0.0	0.00	0.0	2.8		21	0.2		3.9	0.02	0.0	3.7		0.0	0.0
6 14 78	0.0	0.00	0.0	0.00	42	0.0	0.00	0.0	3.6	0.10	26	0.0	0.0	6.9	0.00	0.0	4.0	0.4	0.0	0.0
7 12 78	0.0	0.01	0.0	0.00	34	0.0	0.00	0.0	3.9	0.10	20	0.0	0.0	3.6	0.00	0.1	2.5	0.2	0.0	0.0
8 15 78	0.1	0.00			31	0.0	0.00	0.0	4.2		17	0.0		4.5	0.03	0.0	3.2		0.2	0.0
9 28 78	0.2	0.01			64	0.0	0.00	0.0	5.0		23	0.0		6.1	0.02	0.1	4.4		0.0	0.0
11 6 78	0.2	0.00			77	0.0	0.02	0.1	5.3		28	0.0		10	0.05	0.1	4.8		0.2	0.0
12 7 78	0.1	0.00			39	0.0	0.01	0.0	3.6		17	0.2		5.5	0.03	0.1	3.6		0.1	0.0
1 18 79	0.2	0.00	0.2	0.00	43	0.0	0.01	0.1	3.0	0.25	22	0.6	0.0	4.8	0.04	0.1	3.8	0.2	0.1	0.0
3 15 79	0.1	0.01			39	0.0	0.01	0.1	2.6		25	0.4		4.3	0.04	0.0	3.7		0.0	0.0
4 11 79	0.1	0.00	0.2	0.00	35	0.0	0.01	0.1	2.4	0.15	22	0.3	0.0	3.6	0.02	0.0	3.5	0.2	0.0	0.0
5 16 79	0.5	0.00			45	0.0	0.01	0.4	3.2		21	0.3		4.9	0.01	0.0	4.3		0.1	0.0
6 6 79	0.3	0.01			33	0.0	0.01	0.4	3.1		20	0.3		4.3	0.02	0.0	4.2		0.1	0.0
7 7 79	0.2	0.00	0.0	0.00	46	0.0	0.02	0.1	4.1	0.40	23	0.2	0.0	5.7	0.03	0.1	4.8	0.2	0.1	0.0
7 31 79	0.2	0.00			32	0.2	0.00	0.2	3.7		16	0.1		4.6	0.01	0.1	3.8		0.0	0.0

TABLE 99. WATER QUALITY FOR SITE 3263 PERRY COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UH/CM	MG/L	MILLIGRAMS PER LITER													
6	28	77	20	0.09			1000	392	278	1.17	7.0		16	20	0	2.0	190						
7	26	77	24	0.08			55	1320	911	1.10	7.9		111	133	1	1.7	600	0.4					
8	23	77	21	0.06			95	1060	762	1.23	7.9		72	87	1	1.6	500	0.3					
9	27	77	18	0.06			4	1150	942	1.12	7.9		101	121	1	2.3	620	0.4					
10	25	77	12	0.15			25	946	702	1.34	7.5		86	105	0	1.7	440	0.6					
11	28	77	6	0.9	50		100	600	438	1.10	8.0		40	48	0	1.4	290	0.5					
12	20	77	6	0.25			140	769	603	1.24	7.8		61	73	0	2.1	390	0.9					
1	23	78	0	1.0			45	584	376	1.53	7.7		43	52	0	1.5	220	0.4					
3	7	78	3	0.6			95	592	383	1.41	7.8		46	56	0	2.0	230	1.0					
4	18	78	5	0.6	672		2800	913	653	1.27	7.9		61	73	0	2.6	420	0.4					
5	16	78	17	0.3	135*		95	567	405	1.02	7.8		45	55	0	1.9	270	0.8					
7	12	78	23	0.25			210	952	676	1.08	8.1		71	85	1	2.7	450	0.2					
8	15	78	20	0.1	116*		180	1030	711	1.21	8.1		86	103	1	2.7	450	0.5					
9	28	78	19	0.004	14		2	724	527	1.30	8.0		140	169	1	4.9	290	0.7					
11	6	78	13	0.008	60		65	1230	889	1.48	7.9		111	134	1	3.5	530	0.2					
12	7	78	5	0.007	84		130	846	550	1.24	8.0		80	97	1	2.0	340	0.6					
1	18	79	4	0.25			250	882	627	1.26	7.9		66	79	0	2.3	400	0.7					
3	15	79	8	0.009	2250		3000	871	717	1.45	8.1		65	78	1	2.2	440	0.8					
4	11	79	12	0.02	413	0.11	1800	857	584	1.26	7.4	-26	31	38	0	1.2	380	1.0					
5	16	79	14	0.03	1150	5.5	3300	997	734	1.32	7.9	-61	73	88	1	1.7	460	1.0					
6	6	79	18	0.02	216	0.45	280	847	544	1.51	8.1	-61	79	94	1	1.7	310	1.6					
7	7	79	23	0.03	110	0.00	8	1120	871	1.28	8.2		152	181	2	2.7	510	1.7	1.0	0.91	3.35	0.15	0.00
7	31	79	19	0.06	83	0.05	20	1290	890	1.45	7.7		170	205	1	2.5	500	2.5	1.2	1.10	2.20	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 28 77	0.2	0.01			38	0.0	0.00	0.5	5.1		28	0.8		4.1	0.03	0.0	1.2		0.0	0.0
7 26 77	0.1	0.01			140	0.0	0.00	0.1	7.8		76	1.0		10.0	0.01	0.1	1.4		0.1	0.0
8 23 77	0.2	0.00			130	0.0	0.00	0.2	7.3		71	1.1		10	0.02	0.1	2.4		0.1	0.0
9 27 77	0.1	0.04			140	0.0	0.00	0.1	7.6		86	2.0		11	0.01	0.0	2.6		0.1	0.0
10 25 77	0.1	0.03	0.1	0.00	110	0.0	0.02	0.2	7.4	0.30	75	1.4	0.0	11	0.03	0.0	2.9	1.1	0.1	0.0
11 28 77	0.1	0.03			63	0.0	0.00	0.1	3.5		40	1.0		4.5	0.01	0.0	3.0		0.0	0.1
12 20 77	0.1	0.00			87	0.1	0.02	0.2	4.8		66	0.8		6.2	0.05	0.1	3.4		0.3	0.0
1 23 78	0.2	0.06	0.0	0.00	59	0.0	0.00	0.3	3.8		48	0.0	0.0	5.1	0.04	0.0	2.8	0.6	0.1	0.0
3 7 78	0.1	0.00			58	0.0	0.00	0.2	3.9		45	0.8		4.8	0.00	0.0	2.5		0.0	0.0
4 18 78	0.5	0.00	0.1	0.00	96	0.0	0.01	0.6	6.8	0.50	72	2.3	0.0	7.8	0.03	0.0	2.1	0.8	0.2	0.0
5 16 78	0.1	0.01			50	0.0	0.00	0.1	3.9		37	0.8		4.4	0.01	0.0	3.0		0.1	0.0
7 12 78	0.1	0.03	0.2	0.00	92	0.0	0.00	0.1	10	0.20	61	4.1	0.2	7.3	0.00	0.2	3.1	0.7	0.2	0.0
8 15 78	0.4	0.04			110	0.0	0.00	0.2	9.2		66	2.2		8.4	0.06	0.4	2.9		0.2	0.0
9 28 78	0.1	0.03			75	0.0	0.00	0.0	7.8		40	0.5		15	0.03	0.1	4.7		0.1	0.0
11 6 78	0.4	0.01			150	0.1	0.02	0.4	8.5		91	2.3		22	0.11	0.2	4.2		0.4	0.0
12 7 78	0.2	0.01			85	0.0	0.01	0.2	4.9		51	2.1		6.8	0.05	0.1	3.0		0.2	0.0
1 18 79	0.4	0.00	0.2	0.00	100	0.0	0.02	0.4	5.3	0.85	60	1.7	0.0	7.0	0.05	0.2	2.8	0.7	0.1	0.0
3 15 79	1.0	0.02			130	0.0	0.03	1.3	6.1		79	1.6		9.0	0.07	0.0	4.0		0.2	0.0
4 11 79	0.2	0.00	0.3	0.00	98	0.0	0.00	0.2	4.2	0.55	60	1.0	0.0	5.2	0.02	0.1	2.3	0.6	0.2	0.0
5 16 79	0.2	0.01			130	0.0	0.01	0.1	5.2		72	0.9		7.2	0.05	0.2	1.9		0.4	0.0
6 6 79	0.2	0.04			99	0.0	0.01	0.1	5.3		57	1.0		6.0	0.04	0.1	2.8		0.1	0.0
7 7 79	0.2	0.04	0.1	0.00	150	0.0	0.00	0.1	11	1.0	69	0.9	0.1	13	0.06	0.2	3.6	2.5	0.2	0.0
7 31 79	0.2	0.05	0.1	0.00	160	0.0	0.02	0.0	13	1.5	74	0.9	0.1	18	0.05	0.2	3.6	3.3	0.2	0.0

TABLE 100. WATER QUALITY FOR SITE 3265 PERRY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 28 77	21	0.1			2300	500	331	0.84	6.7			28	34	0	1.3	140	23				
7 26 77	21	0.025			80	770	510	1.09	7.6			49	60	0	1.7	300	9.8				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 28 77	0.6	0.01			31	0.0	0.00	0.9	3.9		26	0.4		6.0	0.02	0.0	3.4		0.0	0.0
7 26 77	0.1	0.01			72	0.0	0.00	0.1	5.6		42	1.0		9.7	0.01	0.0	2.4		0.0	0.0

TABLE 101. WATER QUALITY FOR SITE 3268 PERRY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
8 23 77	21	0.15			380	1920	1440	1.21	8.0			127	152	1	2.7	850	25				
9 27 77	18	0.05	1760		2200	1700	1430	1.10	7.8			61	74	0	1.7	1000	0.1				
10 25 77	13	0.05	531		95	1700	1570	1.27	7.6			189	228	1	2.8	960	9.0				
11 28 77	7	0.25	96		190	1230	915	1.50	7.8			145	175	1	2.1	480	17				
12 20 77	8	0.15			35	1580	1510	1.35	7.9			166	200	1	3.2	960	1.0				
3 21 79						2190	1710	0.99	7.9			85	103	1	3.2	1200	10				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 23 77	0.5	0.01			230	0.1	0.01	0.4	18		130	1.2		12	0.07	0.2	1.8		0.1	0.0
9 27 77	0.2	0.05			220	0.0	0.00	0.0	15		130	0.6		16	0.03	0.1	2.4		0.2	0.0
10 25 77	0.3	0.05	0.1	0.00	240	0.0	0.01	0.4	33	0.65	150	1.0	0.1	17	0.06	0.1	2.3	1.8	0.2	0.0
11 28 77	0.2	0.05			160	0.0	0.00	0.1	8.4		91	1.3		8.3	0.03	0.0	2.4		0.1	0.2
12 20 77	0.2	0.02			230	0.0	0.00	0.2	13		180	1.2		11	0.07	0.1	2.4		0.5	0.0
3 21 79	0.8	0.04			210	0.0	0.00	0.6	15		170	0.1		13	0.06	0.2	4.2		0.6	0.0

TABLE 102. WATER QUALITY FOR SITE 3271 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIG SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	MC03	C03	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER								
9 15 77	22	0.002			10	104	41	2.05	7.5			21	26	0	0.9	20	0.1					
10 12 77	11	0.15			0	90	55	2.47	7.1			20	25	0	1.5	15	0.1					
11 10 77	11	0.4	35		4	83	50	1.97	7.1			16	19	0	1.6	16	0.0					
12 22 77	2	0.15			0	86	58	1.70	7.7			16	19	0	1.7	21	0.1					
1 31 78	1	0.15			20	70	45	1.71	7.0			9	11	0	0.8	17	0.1					
2 28 78	4	0.6			8	72	47	1.63	7.0			8	10	0	1.0	19	0.1					
3 30 78	7	1.0			4	72	47	1.51	6.8			11	13	0	1.0	20	0.1					
4 26 78	10	1.0	131			64	45	1.92	7.1			10	12	0	0.7	16	0.2					
5 18 78	12	0.3	34*		0	73	50	1.65	7.1			11	14	0	1.0	19	0.1					
7 19 78	24	0.0000	79*		10	214	118	3.22	7.5			24	29	0	37	14	0.1					
8 23 78	24	0.005	21*		8	85	65	2.32	7.4			21	26	0	2.5	19	0.1					
11 15 78	18	0.0000	12		30	707	393	8.12	7.7			33	40	0	190	13						
12 28 78	2	0.1	4		5	73	46	1.76	7.5	-1		11	14	0	1.2	15	0.4					
1 26 79	1	0.25	1		5	59	40	1.42	6.8			6	7	0	0.6	17	0.1					
2 28 79	8	0.5	2		7	58	41	1.30	6.7	0		6	7	0	0.5	19	0.1					
4 4 79	12	0.5	18		15	57	43	1.57	6.8			7	8	0	0.7	17	0.1					
5 22 79	18	0.0015	5		8	88	55	2.08	7.0	-7		17	21	0	0.8	18	0.2					
6 21 79		0.09	15		30	68	51	1.92	7.3	-6		16	20	0	1.1	16	0.3					
7 26 79	19	0.1				73	50	2.03	7.3	-1		16	20	0	1.0	15	0.2	0.0	0.04	0.65	0.15	0.01
9 6 79	24	0.015	1		15	84	58	2.42	7.1	-16		23	28	0	1.0	15	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
9 15 77	0.0	0.02			7.1	0.0	0.00	0.0	2.1		3.4	0.0		4.1	0.01	0.0	4.8		0.0	0.0
10 12 77	0.0		0.0	0.00	6.8	0.0	0.00	0.1	1.7	0.01	2.9	0.0	0.0	4.6	0.00	0.0	4.6	0.0	0.0	0.0
11 10 77	0.0	0.00			6.0	0.0	0.00	0.0	1.4		2.6	0.0		3.6	0.00	0.0	4.5		0.0	0.0
12 22 77	0.0	0.00			5.8	0.1	0.00	0.1	1.4		3.8	0.0		3.7	0.02	0.1	4.8		0.2	0.0
1 31 78	0.0	0.00	0.0	0.00	4.6	0.0	0.00	0.1	1.1	0.06	3.1	0.0	0.0	3.0	0.00	0.0	4.3	0.1	0.0	0.0
2 28 78	0.0	0.02			4.6	0.0	0.00	0.0	1.4		3.2	0.0		3.5	0.00	0.0	4.1		0.0	0.0
3 30 78	0.1	0.00			4.6	0.0	0.00	0.0	1.2		3.1	0.0		3.1	0.00	0.0	3.4		0.0	0.0
4 26 78	0.1	0.00	0.0	0.00	4.6	0.0	0.00	0.2	1.6	0.03	3.1	0.0	0.0	2.8	0.00	0.0	4.4	0.0	0.0	0.0
5 18 78	0.0	0.01	0.0	0.00	5.2	0.0	0.00	0.1	1.5	0.07	3.2	0.0	0.0	3.1	0.01	0.0	4.5	0.0	0.0	0.0
7 19 78	0.1	0.01			10	0.0	0.01	0.1	3.5		5.3	0.0		22	0.00	0.1	5.1		0.1	0.0
8 23 78	0.0	0.01			8.2	0.0	0.01	0.2	2.1		3.9	0.0		4.6	0.01	0.0	5.3		0.0	0.0
11 15 78	0.1	0.00			20	0.0	0.00	2.4	3.8		7.0	0.7		130	0.01	0.1	4.7		0.1	0.0
12 28 78	0.0	0.00			5.3	0.0	0.00	0.0	1.3		2.5	0.0		2.8	0.00	0.0	4.0		0.0	0.0
1 26 79	0.0	0.00			4.3	0.0	0.01	0.0	1.2		2.1	0.0		2.3	0.02	0.0	3.8		0.0	0.0
2 28 79	0.0	0.00			4.3	0.0	0.00	0.1	1.2		2.2	0.0		2.2	0.01	0.0	3.6		0.0	0.0
4 4 79	0.1	0.00	0.0	0.00	4.4	0.0	0.01	0.1	1.6	0.10	2.7	0.0	0.0	2.6	0.02	0.0	4.0	0.4	0.0	0.0
5 22 79	0.0	0.00			6.6	0.0	0.01	0.0	1.9		3.4	0.0		3.5	0.01	0.0	4.4		0.0	0.0
6 21 79	0.1	0.00			5.8	0.0	0.00	0.1	1.7		3.0	0.0		2.5	0.00	0.0	4.6		0.0	0.1
7 26 79	0.0	0.00	0.1	0.00	5.7	0.0	0.00	0.1	1.6	0.02	2.8	0.0	0.1	2.7	0.00	0.0	4.6	0.0	0.0	0.3
9 6 79		0.02			6.5	0.0	0.00	0.1	2.2		3.6	0.0		2.9	0.03	0.1	5.0		0.1	0.1

TABLE 103. WATER QUALITY FOR SITE 3272 PIKE COUNTY, KENTUCKY

DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER												
9	15	77	22	0.06			150	294	138	2.35	7.6		52	64	0	0.9	52	0.1				
1	31	78	1	0.2			130	208	120	1.70	7.1		37	45	0	1.8	52	0.4				
2	28	78	2	0.4			170	160	90	1.79	7.3		25	30	0	1.9	37	0.3				
3	30	78	8	1.0			120	164	95	1.63	7.4		26	32	0	3.5	40	0.5				
4	26	78	11	0.7	1180			153	85	1.76	7.3		21	26	0	1.4	37	0.6				
5	18	78	14	0.2	39*		120	210	123	1.73	7.8		41	50	0	1.7	52	0.4				
6	21	78	16	2.0				275	154	3.63	8.0		92	111	1	2.2	38	0.3				
7	19	78	27	0.015	443*		240	253	150	2.54	7.7		64	78	0	1.9	53	0.3				
1	26	79	1	0.2	42		85	309	173	1.86	7.8	-57	48	58	0	0.5	78	1.2				
2	28	79	7	0.4	240		500	280	155	1.80	7.7		39	48	0	1.4	71	1.2				
4	4	79	14	0.25	167		280	184	113	1.72	7.6	-28	31	38	0	1.2	50	0.9				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE		AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																		
9	15	77	0.0	0.00		24	0.0	0.00	0.0	4.3		12	0.3		6.3	0.01	0.0	2.6		0.0	0.0
1	31	78	0.1	0.00	0.0	0.00	14	0.0	0.00	0.6	3.0	0.05	11	0.8	0.0	4.9	0.00	0.0	4.0	0.0	0.0
2	28	78	0.1	0.01			10	0.0	0.00	0.5	2.4		8.6	0.4		4.4	0.01	0.0	3.9		0.0
3	30	78	0.1	0.00			11	0.0	0.00	0.3	2.2		8.4	0.3		4.2	0.00	0.0	3.6		0.1
4	26	78	0.2	0.00	0.0	0.00	10	0.0	0.00	0.2	3.0	0.06	8.1	0.3	0.0	3.9	0.00	0.0	2.8	0.1	0.0
5	18	78	0.1	0.01	0.0	0.00	15	0.0	0.00	0.3	2.8	0.06	11	0.4	0.0	4.7	0.01	0.0	4.1	0.1	0.1
6	21	78	0.0	0.00	0.0	0.00	21	0.0	0.00	0.1	3.7	0.00	19	1.1	0.0	5.8	0.00	0.0	3.1	0.2	0.1
7	19	78	0.1	0.02			19	0.1	0.01	0.1	4.2		20	0.7		4.2	0.00	0.2	3.0		0.2
1	26	79	0.2	0.00			26	0.0	0.01	0.3	3.1		18	0.2		4.9	0.04	0.0	3.6		0.1
2	28	79	0.1	0.00			20	0.0	0.00	0.1	2.9		19	0.2		4.3	0.02	0.0	3.4		0.1
4	4	79	0.1	0.00			15	0.0	0.00	0.1	2.8		11	0.1		3.9	0.01	0.0	3.1		0.0

TABLE 104. WATER QUALITY FOR SITE 3273 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO ₃	CO ₃	CL	SD ₄	NO ₃ AS N	NO ₃ AS N	NH ₃ AS N	TOT N	TOT P	ORTH PO ₄
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
11 15 77	8	0.05	7		4	149	84	1.63	7.6			20	25	0	0.8	37	0.1				
12 22 77	4	0.025			4	165	107	2.18	7.4			37	45	0	1.7	40	0.2				
2 28 78	3	0.09			20	162	88	1.96	7.5			27	33	0	1.3	36	0.1				
3 30 78	6	0.07			8	148	86	1.63	7.2			23	28	0	1.7	39	0.1				
4 26 78	10	0.2	322			96	54	1.97	7.3			16	19	0	0.9	20	0.2				
5 18 78	12	0.005	22*		15	157	95	1.70	7.6			30	36	0	0.8	41	0.1				
8 23 78	20	0.0001				212	125	3.20	7.9			62	75	0	0.5	35	0.2				
10 5 78	19	0.0002				253	147	3.45	8.2			90	108	1	0.9	36	0.1				
12 28 78	2	0.02	4		3	142	79	2.22	7.5	-30		30	36	0	1.1	28	0.2				
1 26 79	0	0.06			20	110	70	1.69	7.3			14	17	0	0.5	32	0.1				
2 28 79	6	0.06	2		30	100	65	1.40	7.0	-11		11	14	0	0.7	32	0.1				
4 4 79	13	0.07	39		60	95	69	1.45	7.1	-11		12	15	0	0.6	34	0.0				
5 22 79	18	0.0003	8		10	172	101	2.04	7.8	-36		40	49	0	0.8	38	0.1				
6 21 79		0.06	96	0.50	15	114	68	2.42	7.5	-21		29	35	0	1.1	22	0.0				
7 26 79	22	0.08	224	0.25	550	113	66	2.29	7.6	-13		27	33	0	1.1	21	0.1		1.10	0.60	
8 6 79						115	72	2.38	7.5	-26		28	34	0	1.1	23	0.1	0.1	0.05		0.01
9 6 79	22	0.0009	3		20	182	106	2.69	7.7	-42		52	64	0	4.2	29	0.2				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
11 15 77	0.0	0.01			11	0.0	0.00	0.0	1.3		6.0	0.0		5.1	0.00	0.0	4.9		0.0	0.0
12 22 77	0.0	0.00			13	0.1	0.00	0.1	1.9		11	0.0		6.6	0.02	0.1	3.9		0.2	0.0
2 28 78	0.1	0.01			10	0.0	0.00	0.0	1.8		8.1	0.0		6.2	0.01	0.0	3.5		0.0	0.0
3 30 78	0.1	0.00			9.5	0.0	0.00	0.1	1.6		7.3	0.0		5.7	0.00	0.0	3.2		0.1	0.0
4 26 78	0.2	0.00	0.0	0.00	5.8	0.0	0.00	0.2	1.4	0.03	4.8	0.0	0.1	3.8	0.00	0.0	3.0	0.1	0.0	0.0
5 18 78	0.0	0.01	0.0	0.00	11	0.0	0.00	0.0	1.8	0.05	7.8	0.0	0.0	6.1	0.01	0.0	3.6	0.1	0.0	0.0
8 23 78	0.1	0.01			17	0.0	0.01	0.1	3.5		12	0.0		9.0	0.01	0.0	4.2		0.0	0.0
10 5 78	0.1	0.00	0.0	0.00	19	0.0	0.00	0.1	3.1	0.06	15	0.0	0.0	8.4	0.01	0.0	4.2	0.2	0.0	0.0
12 28 78	0.1	0.01			9.9	0.0	0.00	0.0	1.6		7.1	0.0		5.2	0.02	0.0	3.4		0.1	0.0
1 26 79	0.3	0.00			8.7	0.0	0.01	0.4	1.7		6.0	0.0		4.4	0.01	0.0	3.3		0.1	0.0
2 28 79	0.1	0.00			7.2	0.0	0.00	0.1	1.6		4.8	0.0		4.0	0.00	0.0	3.2		0.0	0.0
4 4 79	0.1	0.01	0.0	0.00	8.1	0.0	0.00	0.2	1.8	0.15	5.2	0.2	0.0	3.9	0.01	0.0	3.5	0.1	0.0	0.0
5 22 79	0.0	0.00			12	0.0	0.01	0.0	2.3		8.4	0.0		6.9	0.01	0.0	3.7		0.0	0.0
6 21 79	0.2	0.01			9.0	0.0	0.00	0.2	1.8		5.9	0.0		4.1	0.01	0.0	2.9		0.0	0.0
7 26 79	0.1	0.02			8.3	0.0	0.00	0.1	2.0		5.2	0.0		3.7	0.00	0.0	3.6		0.0	0.0
8 6 79	0.2		0.2	0.00	8.8	0.0		0.2	2.2	0.10	6.0	0.0	0.0	4.5	0.00	0.0	3.8	0.1	0.0	0.3
9 6 79	0.1	0.01			14	0.0	0.01	0.1	2.4		9.0	0.0		6.2	0.03	0.1	4.0		0.1	0.0

TABLE 105. WATER QUALITY FOR SITE 3275 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS H	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L														
9 15 77	25	0.03			380	154	83	2.81	7.1		40	49	0	0.7	23	0.4				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
9 15 77	0.1	0.00			12	0.0	0.00	0.1	4.0		5.3	0.0		5.3	0.00	0.0	2.8		0.0	0.0

TABLE 106. WATER QUALITY FOR SITE 3276 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS H	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L														
11 10 77			75		650	180	100	1.85	7.4		28	34	0	1.6	42	0.1				
11 15 77	8	0.1	7		4	210	104	2.29	7.9		39	48	0	0.9	39	0.1				
1 31 78	2	0.1			35	114	67	1.54	8.0		11	13	0	1.0	32	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
11 10 77	0.2	0.00			14	0.0	0.00	0.3	3.0		8.2	0.0		4.8	0.00	0.0	4.2		0.0	0.0
11 15 77	0.0	0.01			15	0.0	0.00	0.0	1.8		9.6	0.0		6.8	0.00	0.0	3.6		0.0	0.0
1 31 78	0.1	0.00	0.0	0.00	7.2	0.0	0.00	0.1	1.3	0.10	5.3	0.0	0.0	4.8	0.00	0.0	4.2	0.1	0.0	0.0

TABLE 107. WATER QUALITY FOR SITE 3278 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 HCO3	CO3	CL	SO4	NO3 AS	NO3 M	NH3 AS	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L									MILLIGRAMS PER LITER					
10 12 77	11	0.05	108		270	210	124	2.01	7.2		43	52	0	2.2	48					
11 10 77	12	0.3	315		750	184	107	1.58	7.7		27	33	0	2.3	45					
12 22 77	2	0.09			10	180	111	2.05	7.5		38	46	0	2.0	42					
8 23 78	23	0.008	329*		2000	270	152	1.89	7.7		45	55	0	1.2	67					
10 5 78	20	0.02	94*		65	285	177	2.74	8.1		94	113	1	1.1	57					
11 14 78	18	0.01	4		20	303	167	7.00	8.3		124	147	2	2.6	23					
12 28 78	3	0.03	24		40	237	142	1.98	7.7	-49	42	51	0	0.8	60					
5 22 79	18	0.01	0		30	273	154	2.37	8.1	-70	70	84	1	1.5	56					
6 21 79		0.1	421*		2800	323	187	1.81	8.2	-64	66	78	1	1.8	83					
7 26 79	21	0.2		0.70	2700	315	170	1.73	8.1	-44	57	69	1	2.1	75			1.75	0.85	
8 6 79				0.35		295	153	2.12	8.0	-40	54	65	0	2.0	61		0.3	0.11		0.01
9 6 79	25	0.015	5		30	391	231	2.55	8.2	-90	116	139	1	2.0	79					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 12 77	0.1		0.0	0.00	18	0.0	0.01	0.2	3.6	0.04	10	0.6	0.0	5.7	0.00	0.0	3.6	0.1	0.0	0.0
11 10 77	1.5	0.00			14	0.0	0.00	2.1	2.7		7.6	0.4		4.0	0.01	0.0	4.7		0.0	0.0
12 22 77	0.0	0.00			15	0.1	0.00	1.1	2.5		10	0.8		4.7	0.02	0.1	3.8		0.3	0.0
8 23 78	0.2	0.01			20	0.0	0.01	0.3	4.4		17	0.2		5.1	0.01	0.0	3.5		0.0	0.1
10 5 78	0.1	0.01	0.0	0.00	30	0.0	0.00	0.0	4.7	0.09	17	0.8	0.0	4.9	0.01	0.0	1.8	0.2	0.0	0.0
11 14 78	0.1	0.00			33	0.0	0.01	0.0	4.2		17	0.1		6.0	0.01	0.0	2.7		0.1	0.0
12 28 78	0.1	0.01			18	0.0	0.00	0.6	3.1		16	0.5		5.2	0.04	0.1	3.9		0.2	0.1
5 22 79	0.0	0.01			23	0.0	0.00	0.1	3.7		16	0.7		5.7	0.01	0.0	2.0		0.1	0.0
6 21 79	0.2	0.00	0.0	0.00	24	0.0	0.00	0.2	4.2	0.20	20	0.1	0.0	5.8	0.02	0.1	2.9	0.1	0.1	0.0
7 26 79	0.1	0.02			21	0.0	0.00	0.0	3.1		18	0.0		4.5	0.00	0.1	2.3		0.1	0.0
8 6 79	0.2	0.00	0.1	0.00	21	0.0	0.00	0.2	3.9	0.25	17	0.0	0.0	5.1	0.01	0.0	2.6	0.1	0.0	0.2
9 6 79	0.2	0.02			37	0.0	0.00	0.0	5.0		24	0.8		6.9	0.01	0.0	1.7		0.1	0.0

TABLE 108. WATER QUALITY FOR SITE 3279 PIKE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
9 13 77	18	0.0001			10	140	78	1.56	7.5			17	21	0	1.0	33	0.5				
10 12 77	13	0.025			4	189	111	1.65	7.2			30	37	0	1.0	48	0.6				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 13 77	0.0	0.00			9.0	0.0	0.00	0.0	2.1		4.5	0.0		6.0	0.00	0.0	4.6		0.0	0.0
10 12 77	0.0		0.0	0.00	13	0.0	0.00	0.0	2.0	0.02	8.2	0.0	0.0	7.5	0.00	0.0	4.8	0.1	0.0	0.0

TABLE 109. WATER QUALITY FOR SITE 3280 PULASKI COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 MCO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
7 6 77	19	0.015			45	414	234	1.06	5.5			0	0	0	0.8	160	1.1				
8 2 77	18	0.01			15	419	237	1.18	6.7			8	10	0	0.7	160	0.1				
12 15 78	4	0.01					326	1.05	4.3			0	0	0	0.4	230					
1 18 79	3	0.1				411	237	1.21	4.3			0	0	0	0.7	160	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 6 77	0.5	0.01			20	0.0	0.00	0.1	2.0		29	4.6		3.0	0.11	0.1	5.2		0.1	0.1
8 2 77	0.3	0.00			26	0.0	0.00	0.2	2.1		28	4.6		3.0	0.12	0.0	4.9		0.1	0.1
12 15 78	2.2	0.02			35	0.1	0.01	0.1	2.2		37	7.1		2.7	0.16	0.1	5.0		0.1	0.2
1 18 79	1.5	0.00			29	0.0	0.00		2.0		29	5.3		2.3	0.13	0.0	4.0		0.1	0.1

TABLE 110. WATER QUALITY FOR SITE 3281 PULASKI COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	SPEC TURB	DIS COND	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3	NO3	NO3	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L										
----- MILLIGRAMS PER LITER -----																
8 30 77	21	0.006			10	127	65	4.91	7.0		40	49	0	1.0	12	0.1
10 4 77	13	0.1	25		35	66	39	2.31	6.4		14	17	0	1.0	12	0.1
11 2 77	12	0.05	29		10	104	57	3.38	7.0		25	30	0	1.0	14	0.0
11 30 77	9	0.5	32		35	54	36	1.55	7.2		10	12	0	0.7	14	0.1
12 27 77	3	0.04	8		0	76	43	3.28	6.7		19	23	0	0.6	11	0.1
12 13 78	6	0.06	9		10	48	35	1.84	7.0	-7	9	11	0	0.7	12	0.1
12 15 78	4	0.009	3		15	54	37	2.43	7.6	-7	14	17	0	0.8	10	0.2
1 18 79	3	0.03	21		10	55	34	2.55	6.7	-12	12	15	0	0.9	9	0.1
3 15 79	5	0.08	3		7	50	32	1.95	6.6	-8	10	12	0	0.5	12	0.0
4 10 79	9	0.03	19	0.00	25	46	37	1.60	7.0	-7	10	12	0	1.4	14	0.0
5 9 79	14	0.002	16	0.00	60	55	37	1.70	7.1	-11	7	9	0	0.7	15	0.0
6 11 79	16	0.0005	35*		50	72	54	3.06	7.3		34	42	0	1.6	10	0.6
7 2 79	17	0.0007	9		15	139	80	5.82	7.9	-48	54	65	0	1.3	12	0.1 0.0 0.22 1.10 0.05 0.00
7 27 79	18	0.06	22	0.05	55	46	38	1.67	7.2	-4	8	10	0	0.7	14	0.3 0.1 0.03 0.50 0.00 0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
8 30 77	0.0	0.00			10	0.0	0.00	0.1	1.9		6.0	0.0		3.7	0.01	0.0	2.9		0.0	0.0
10 4 77	0.0	0.00	0.0 0.00		4.2	0.0	0.00	0.1	1.2	0.04	3.3	0.0	0.0	1.7	0.01	0.0	3.3	0.0	0.0	0.0
11 2 77	0.1	0.01			8.8	0.0	0.00	0.1	1.8		5.3	0.0		2.6	0.02	0.0	3.8		0.0	0.0
11 30 77	0.0	0.00			3.7	0.0	0.00	0.0	0.9		2.6	0.0		1.1	0.00	0.0	3.0		0.0	0.0
12 27 77	0.0	0.00	0.0 0.00		6.0	0.0	0.00	0.1	0.9	0.10	4.5	0.0	0.0	1.9	0.00	0.0	2.8	0.1	0.0	0.0
12 13 78	0.0	0.00			4.0	0.0	0.01	0.0	1.1		2.6	0.0		1.6	0.00	0.0	2.9		0.0	0.0
12 15 78	0.1	0.01			4.0	0.1	0.01	0.0	1.4		2.8	0.0		1.6	0.08	0.0	3.0		0.2	0.0
1 18 79	0.1	0.00	0.0 0.00		4.0	0.0	0.00	0.0	1.1	0.06	3.0	0.0	0.0	1.3	0.02	0.1	2.9	0.0	0.1	0.0
3 15 79	0.0	0.00			3.8	0.0	0.01	0.0	0.8		2.8	0.0		1.3	0.01	0.0	2.5		0.0	0.0
4 10 79	0.2	0.00	0.1 0.00		3.9	0.0	0.00	0.2	0.9	0.10	3.1	0.1	0.0	1.2	0.01	0.0	2.6	0.0	0.0	0.1
5 9 79	0.2	0.00			4.4	0.0	0.00	0.1	0.9		3.0	0.0		1.3	0.00	0.0	3.0		0.0	0.0
6 11 79	0.1	0.00	0.0 0.00		6.3	0.0	0.00	0.1	1.1	0.10	3.6	0.0	0.0	1.7	0.00	0.0	2.6	0.0	0.0	0.1
7 2 79	0.0	0.01	0.0 0.00		14	0.0	0.00	0.0	1.5	0.15	8.2	0.0	0.0	3.4	0.00	0.0	2.6	0.1	0.0	0.0
7 27 79	0.1	0.00			4.0	0.0	0.00	0.0	1.1		3.0	0.4		1.1	0.01	0.0	3.3		0.0	0.0

TABLE 111. WATER QUALITY FOR SITE 3282 PULASKI COUNTY, KENTUCKY

														M03 #M03 NH3							TOT		TOT ORTH				
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	AS N	AS N	AS N	N	P	PO4						
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU UM/CM	MG/L	----- MILLIGRAMS PER LITER -----																		
6	1	77	20	0.015			10	163	90	3.79	8.2		64	77	1	1.5	19										
7	6	77	23	0.025			15	202	125	2.36	7.8		61	74	0	1.4	27	5.2									
8	2	77	22	0.15			100	396	226	1.80	6.9		60	73	0	1.7	88	6.2									
8	30	77	26	0.015			8	358	182	2.39	7.1		68	83	0	1.5	46	7.8									
10	4	77	14	0.06	78		95	282	182	1.69	7.8		41	50	0	3.2	47	12									
11	2	77	13	0.04	18		4	323	162	2.58	7.4		57	70	0	1.6	47	4.2									
11	30	77	9	0.15	41		90	180	92	2.03	7.8		31	38	0	0.9	32	1.8									
12	27	77	2	0.03	5		0	261	128	2.66	7.8		57	69	0	0.9	42	0.0									
2	6	78	1	0.4			6	327	180	2.44	7.8		67	81	0	1.7	66	1.5									
3	14	78	10	0.3			200	145	80	2.51	7.7		34	42	0	3.0	22	1.0									
4	12	78	12	0.2	9		4	242	142	2.01	7.8		61	73	0	1.7	53	0.9									
5	9	78	24	0.2	46*		55	271	141	1.47	7.4		44	54	0	10	54	2.0									
6	9	78	20	0.1			45	283	138	2.62	7.8		75	90	0	1.3	46										
7	6	78	25	0.01	26*		8	298	180	2.72	8.0		82	99	1	1.6	60	0.8									
8	7	78	21	0.2	38*		20	371	210	1.81	7.6		66	80	0	1.7	90	2.3									
12	15	78	4	0.02	12		0	458	296	1.68	7.8		89	108	0	1.2	140	2.1									
1	12	79	4	0.15	4		6	519	331	1.55	8.0		94	114	1	1.7	150	3.7									
3	7	79	7	0.025	43		7	566	403	1.65	8.2		101	120	1	1.4	200	3.7									
4	10	79	8	0.06	7	0.00	3	428	280	1.90	8.4		84	100	2	1.4	130	1.5									
5	9	79	18	0.015	34	0.20	75	429	290	2.17	7.8		99	120	0	1.3	120	1.0									
6	11	79	23	0.006	10		20	410	263	1.85	8.3	-81	95	113	1	1.4	120	0.8									
7	2	79	19	0.01	10		8	450	307	1.58	8.4	-83	96	113	2	1.5	150	0.7	0.1	0.05	0.00	0.10	0.01				
7	25	79	24	0.05	25	5.1	80	475	254	2.04	8.3	-86	92	109	1	1.4	110	0.6	0.2	0.06	0.60	0.00	0.00				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 1 77	0.1	0.01			16	0.1	0.03	0.0	2.5		6.4	0.6		1.9	0.05	0.2	1.7		0.1	0.0
7 6 77	0.1	0.02			19	0.0	0.00	0.0	2.7		7.4	0.7		2.2	0.00	0.0	2.0		0.0	0.0
8 2 77	0.1	0.05			37	0.0	0.00	0.1	6.5		19	1.8		3.6	0.02	0.0	2.0		0.1	0.0
8 30 77	0.1	0.00			34	0.0	0.00	0.2	5.2		10	0.8		4.4	0.01	0.0	1.7		0.0	0.0
10 4 77	0.1	0.00	0.1	0.00	27	0.0	0.00	0.1	4.6	0.10	12	0.9	0.0	3.8	0.02	0.0	2.4	0.2	0.0	0.0
11 2 77	0.1	0.04			31	0.0	0.00	0.2	5.0		12	1.4		4.0	0.03	0.0	2.6		0.0	0.0
11 30 77	0.1	0.00			17	0.0	0.00	0.1	2.2		6.2	0.9		1.8	0.00	0.0	2.2		0.0	0.0
12 27 77	0.1	0.01	0.1	0.00	24	0.0	0.00	0.2	3.8	0.25	11	1.9	0.0	3.1	0.02	0.0	2.5	0.2	0.0	0.0
2 6 78	0.1	0.01			29	0.0	0.00	0.2	4.5		22	1.9		3.8	0.02	0.0	2.3		0.0	0.0
3 14 78	0.3	0.00			14	0.0	0.01	0.3	2.2		6.0	0.5		1.8	0.00	0.0	1.8		0.0	0.0
4 12 78	0.4	0.02	0.0	0.00	23	0.0	0.01	0.2	3.8	0.09	11	1.1	0.0	3.3	0.03	0.1	1.5	0.1	0.1	0.0
5 9 78	0.1	0.03			20	0.0	0.00	0.1	4.0		10	0.5		3.2	0.01	0.0	1.7		0.0	0.0
6 9 78	0.1	0.02			26	0.0	0.00	0.1	3.5		11	0.5		3.2	0.00	0.0	1.3		0.0	0.0
7 6 78	0.2	0.04	0.0	0.00	36	0.0	0.00	0.1	3.8	0.15	17	0.5	0.0	3.4	0.00	0.0	1.6	0.2	0.0	0.0
8 7 78	0.1	0.05			41	0.0	0.00	0.5	4.7		16	0.3		2.5	0.01	0.1	1.2		0.0	0.0
12 15 78	0.1	0.06			52	0.0	0.01	0.1	6.4		24	1.3		5.8	0.05	0.1	2.1		0.1	0.0
1 12 79	0.1	0.03	0.1	0.00	58	0.1	0.01	0.1	7.2	0.35	25	1.7	0.0	3.6	0.07	0.2	2.0	0.3	0.2	0.1
3 7 79	0.2	0.05			70	0.0	0.02	0.1	7.0		37	2.0		7.2	0.06	0.1	2.1		0.1	0.3
4 10 79	0.4	0.03	0.2	0.00	50	0.1	0.02	0.2	5.2	0.30	28	1.4	0.0	4.9	0.05	0.0	1.7	0.3	0.0	0.2
5 9 79	0.2	0.04			57	0.0	0.01	0.1	5.0		30	1.5		4.7	0.03	0.1	1.6		0.1	0.1
6 11 79	0.1	0.05			44	0.0	0.00	0.1	5.8		24	1.2		4.4	0.02	0.0	1.9		0.1	0.0
7 2 79	0.1	0.05	0.0	0.00	50	0.0	0.00	0.1	5.9	0.45	27	1.1	0.1	5.2	0.02	0.0	1.4	0.3	0.1	0.0
7 25 79	0.2	0.04			47	0.0	0.03	0.1	5.4		25	1.2		4.5	0.01	0.1	1.3		0.0	0.0

TABLE 112. WATER QUALITY FOR SITE 3283 PULASKI COUNTY, KENTUCKY

NEW YORK COUNTY																							
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	CO3	CO3	CL	SD4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04	
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
6	1	77	22	0.05			0	1330	977	0.68	3.2		0	0	0	1.9	750						
7	6	77	20	0.03			35	1110	552	0.55	2.8		0	0	0	0.9	410	0.0					
8	2	77	18	0.3			10	959	519	0.56	3.0		0	0	0	0.8	380	0.0					
8	30	77	26	0.4			4	1130	512	0.53	2.5		0	0	0	0.8	380	0.0					
10	4	77	11	0.4	20		8	562	288	0.68	3.4		0	0	0	0.7	200	0.1					
11	2	77	11	0.15	33		0	1040	486	0.67	2.9		0	0	0	0.9	340	0.0					
11	30	77	9	1.5	6		4	448	194	0.53	3.2		0	0	0	0.7	140	0.1					
12	27	77	2	0.25	2		0	883	481	0.56	3.1		0	0	0	1.6	350	0.1					
3	14	78	9	1.0	284		120	293	149	0.54	3.4		0	0	0	1.2	110	0.1					
4	12	78	12	0.09	8		4	1040	529	0.58	2.8		0	0	0	0.9	390	0.1					
5	9	78	22	0.1	25*		20	306	139		3.6		0	0	0		96	0.1					
6	9	78	20	0.04			8	821	422	0.58	3.0		0	0	0	0.8	310	0.3					
7	6	78	19	0.04	23*		8	1230	619	0.55	2.8		0	0	0	1.1	460	0.0					
8	7	78	25	0.5	30*		0	919	387	0.54	2.9		0	0	0	0.9	280	0.2					
9	25	78	21		9		10	1180	528	0.55	2.9		0	0	0	0.8	390	0.1					
10	30	78	13	0.003	11		0	1090	611	0.53	2.8	180	0	0	0	2.1	450	0.0					
12	4	78	9	0.3	2		8	411	150	0.57	3.3		0	0	0	0.4	100	0.0					
1	12	79	4	0.04	19		20	801	459	0.63	3.0		0	0	0	0.7	330	0.0					
3	7	79	5	0.015	31		5	900	468	0.40	3.1	160	0	0	0	0.6	350	0.0					
4	10	79	9	0.03	13	0.00	60	634	348	0.66	3.1	98	0	0	0	0.5	250	0.0					
5	9	79	17	0.01	32	0.06	65	895	461	0.60	2.9	160	0	0	0	0.6	340	0.0					
6	11	79	23	0.005	28*		3	1080	599	0.45	2.9	200	0	0	0	0.7	460	0.0					
7	2	79	18	0.009	38*		25	1170	644	0.47	2.9	200	0	0	0	0.5	480	0.0	0.0	0.28	0.60	0.20	0.01
7	27	79	23	0.05	6		50	398	194	0.49	3.3	58	0	0	0	0.5	140	0.0	0.0	0.15	0.75	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
6 1 77	13	0.02			86	0.4	0.03	0.4	4.0		72	25		5.9	0.46	0.2	7.6		0.3	0.5
7 6 77	13	0.02			38	0.1	0.02	15	2.6		32	5.8		3.1	0.21	0.0	14		0.1	0.3
8 2 77	13	0.02			38	0.1	0.02	16	2.8		29	6.7		3.0	0.23	0.1	14		0.1	0.3
8 30 77	11	0.00			35	0.1	0.02	12	3.7		27	5.7		3.5	0.20	0.0	14		0.0	0.4
10 4 77	6.4	0.00	0.0	0.00	20	0.1	0.01	11	2.3	0.10	20	4.2	0.0	2.3	0.14	0.0	9.8	0.1	0.0	0.2
11 2 77	11	0.05			40	0.2	0.02	17	3.5		30	6.8		3.3	0.24	0.1	14		0.1	0.2
11 30 77	5.5	0.00			14	0.0	0.01	6.0	1.8		9.1	2.9		1.4	0.09	0.0	6.3		0.0	0.1
12 27 77	16	0.00	0.0	0.00	30	0.1	0.01	19	2.6	0.35	29	6.5	0.0	2.5	0.20	0.0	12	0.2	0.1	0.2
3 14 78	3.6	0.02			10	0.0	0.01	3.2	1.4		8.1	2.1		1.1	0.07	0.0	4.5		0.0	0.1
4 12 78	13	0.01	0.0	0.00	32	0.2	0.02	17	2.9	0.20	35	8.7	0.0	2.7	0.26	0.1	12	0.1	0.2	0.3
5 9 78	4.0	0.01			10	0.0	0.02	3.4	1.8		8.0	2.0		1.5	0.07	0.0	5.1		0.0	0.1
6 9 78	11	0.01			27	0.1	0.01	9.6	2.8		27	6.1		2.6	0.18	0.0	12		0.1	0.3
7 6 78	14	0.03	0.0	0.01	46	0.1	0.01	8.6	3.6	0.20	34	8.1	0.0	2.9	0.21	0.1	16	0.1	0.0	0.4
8 7 78	7.4	0.03			31	0.1	0.00	8.2	2.6		19	5.8		1.4	0.15	0.1	12		0.1	0.2
9 25 78	12	0.03			37	0.2	0.03	9.8	4.0		28	8.9		3.1	0.26	0.1	17		0.3	0.3
10 30 78	15	0.01			45	0.1	0.01	10	3.4		31	11		3.1	0.25	0.1	16		0.0	0.3
12 4 78	4.2	0.00			11	0.1	0.01	4.5	1.9		7.4	3.0		1.2	0.09	0.0	5.5		0.1	0.1
1 12 79	11	0.01	0.1	0.00	40	0.1	0.03	16	2.7	0.40	26	5.7	0.0	2.6	0.22	0.1	11	0.1	0.1	0.4
3 7 79	15	0.02			46	0.1	0.03	19	2.6		6.2	0.1		2.2	0.27	0.1	10		0.1	0.7
4 10 79	8.7	0.01	0.2	0.00	30	0.1	0.01	9.9	2.0	0.15	22	3.9	0.0	1.8	0.15	0.0	7.4	0.1	0.0	0.3
5 9 79	12	0.00			37	0.1	0.01	12	2.2		28	5.6		2.0	0.21	0.0	9.5		0.0	0.3
6 11 79	12	0.01	0.0	0.00	40	0.1	0.01	16	2.9	0.35	26	7.1	0.0	2.6	0.27	0.0	14	0.1	0.1	0.4
7 2 79	16	0.03	0.0	0.00	47	0.1	0.06	23	3.4	0.35	26	7.8	0.1	3.2	0.31	0.1	16	0.1	0.1	0.4
7 27 79	3.7	0.01	0.0	0.00	13	0.1	0.01	5.1	1.6	0.15	9.0	2.8	0.0	1.3	0.09	0.1	7.1	0.1	0.0	0.1

TABLE 113. WATER QUALITY FOR SITE 3284 PULASKI COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
12 11 78	8	0.04	5		8	38	28	1.81	6.8	-4	7	8	0	0.6	9	0.3					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
12 11 78	0.0	0.00			3.2	0.0	0.00	0.0	0.9		2.1	0.0		0.8	0.01	0.0	2.4		0.0	0.0

TABLE 114. WATER QUALITY FOR SITE 3286 PULASKI COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
6 1 77	19	0.03			10	1320	880	0.40	2.7		0	0	0	0.8	700						
12 15 78	3	0.02				1630		0.87	3.1		0	0	0	0.6	1200						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 1 77	6.0	0.03			42	0.2	0.06	36	3.5		42	9.2		3.4	0.38	0.2	16		0.3	0.6
12 15 78	10	0.04			190	0.4	0.02	5.0	6.0		140	29		8.0	0.61	0.3	6.5		0.4	0.5

TABLE 115. WATER QUALITY FOR SITE 3289 PULASKI COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NC03	CO3	CL	SD4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
2 6 78	2	0.15			0	717	486	1.14	4.7			0	0	0	1.3	330	0.2				
3 14 78	8	0.6	95		80	277	186	0.99	4.7			0	0	0	0.9	130	0.2				
4 12 78	9	0.1	11		4	630	447	1.05	4.7			0	0	0	1.5	310	0.2				
5 9 78	20	0.06	39*		10	293	178	0.98	5.1			0	0	0	0.8	120	0.2				
6 9 78	19	0.04			20	695	512	0.85	4.5			0	0	0	1.3	380	0.3				
7 6 78	25	0.009	29*		25	772	554	0.89	4.7			0	0	0	1.2	410	0.2				
8 7 78	23	0.2	41*		35	634	399	0.92	4.5			0	0	0	1.0	280	0.3				
9 25 78	20	0.002	12		10	844	605	0.92	4.7			0	0	0	0.8	440	0.1				
10 30 78	13	0.002	39		10	922	742	0.82	4.7	42		0	0	0	1.1	560	0.0				
12 4 78	9	0.3	10		15	324	182	0.97	4.5			0	0	0	0.6	130	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
2 6 78	4.1	0.00			52	0.1	0.01	0.1	3.1		62	15		3.6	0.25	0.0	5.1		0.1	0.2
3 14 78	1.4	0.00			17	0.0	0.01	0.2	1.9		21	4.0		1.9	0.08	0.0	3.0		0.1	0.1
4 12 78	2.9	0.00	0.0	0.00	41	0.1	0.01	0.1	2.9	0.15	55	18	0.0	3.3	0.22	0.1	5.0	0.1	0.2	0.2
5 9 78	0.9	0.01			16	0.0	0.01	0.1	2.1		20	4.8		2.0	0.09	0.0	3.4		0.0	0.1
6 9 78	3.9	0.01			43	0.1	0.02	0.3	3.2		53	14		3.5	0.22	0.0	5.7		0.1	0.2
7 6 78	3.1	0.03	0.0	0.00	55	0.0	0.01	0.1	4.4	0.20	55	12	0.0	4.1	0.17	0.0	5.6	0.2	0.0	0.2
8 7 78	2.3	0.02			42	0.0	0.00	0.3	3.4		39	11		2.0	0.18	0.1	5.8		0.1	0.2
9 25 78	2.8	0.02			61	0.0	0.01	0.1	4.8		62	15		4.1	0.28	0.1	7.1		0.1	0.2
10 30 78	3.0	0.01			70	0.0	0.00	0.1	4.8		71	15		4.3	0.28	0.1	6.0		0.1	0.2
12 4 78	1.4	0.00			18	0.0	0.01	0.1	2.0		19	4.9		1.5	0.11	0.0	3.8		0.0	0.1

TABLE 116. WATER QUALITY FOR SITE 3291 ROCKCASTLE COUNTY, KENTUCKY

TABLE 1109																							
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4	
MO	DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER														
8	30 77	23	0.015			25	31	20	1.65	6.5			2	3	0	0.8	7	0.1					
10	3 77	17	0.25	18		8	25	24	1.36	6.1			5	6	0	0.7	7	0.3					
11	2 77	15	0.1	55		20	24	23	1.59	5.9			1	1	0	0.9	9	0.0					
11	30 77	10	0.6	6		4	25	19	1.33	6.1			2	2	0	0.7	7	0.1					
12	27 77	4	0.15	0		0	25	20	1.37	6.2			2	2	0	0.9	7	0.1					
1	30 78	0	0.6			0	23	20	1.26	6.1			2	2	0	0.8	7	0.3					
3	14 78	8	1.0			4	27	20	1.00	5.7			0	0	0	1.0	9	0.2					
4	12 78	12	0.05	7		8	25	23	1.38	6.2			2	2	0	1.0	9	0.2					
5	8 78	14	0.15	64*		35	39	29	1.20	6.4			2	2	0	0.5	14	0.2					
6	6 78	18	0.02			8	30	21	1.26	6.1			2	3	0	0.9	7	0.3					
7	6 78	24	0.005	41*		10	24	25	1.43	6.8			4	5	0	1.0	9	0.1					
8	7 78	22	0.01	31*		10	27	20	1.16	6.4			3	4	0	1.1	6	0.2					
9	22 78	20	0.0000	38*		10	40	26	2.85	6.8			11	13	0	0.8	6	0.1					
10	30 78	15	0.0001	19		5	32	22	1.30	6.8	0		4	5	0	0.7	9	0.0					
12	5 78	10	0.05	14		5	22	21	0.78	5.4			0	0	0	0.6	10	0.2					
1	12 79	3	0.05	13		2	20	21	1.05	5.7			1	1	0	0.6	9	0.1					
3	9 79	9	0.009			5	21	21	0.95	5.8	3		1	1	0	0.5	11	0.0					
4	13 79	10	0.05	6	0.02	3	22	19	1.10	5.6			0	0	0	0.5	8	0.0					
5	17 79	15	0.0002	42		9	24	22	1.14	6.0	4		1	1	0	0.5	10	0.1					
6	10 79	21	0.001	19		10	28	21	2.23	6.6	7		7	8	0	0.9	5	0.0					
7	12 79	15	0.007	21*		15	24	20	1.06	6.6	-1		2	3	0	1.0	8	0.0	0.0	0.02	0.80	0.10	0.00
7	27 79	18	0.2	9		30	26	27	0.83	6.4	4		2	2	0	0.5	13	0.0	0.0	0.03	0.50	0.05	0.01

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 30 77	0.0	0.00			1.4	0.0	0.01	0.1	1.2		1.4	0.1		1.2	0.01	0.0	2.5		0.0	0.0
10 3 77	0.1	0.00	0.0	0.00	1.2	0.0	0.00	0.1	0.9	0.02	1.4	0.0	0.0	1.0	0.01	0.0	3.3	0.0	0.0	0.0
11 2 77	0.0	0.00			2.0	0.0	0.00	0.0	1.0		1.6	0.1		1.3	0.00	0.0	3.2		0.0	0.0
11 30 77	0.0	0.00			1.3	0.0	0.00	0.0	0.9		1.2	0.0		0.8	0.01	0.0	2.8		0.0	0.0
12 27 77	0.0	0.00			1.0	0.0	0.00	0.0	0.8		1.5	0.0		0.9	0.01	0.0	2.8		0.1	0.0
1 30 78	0.0	0.00	0.0	0.00	1.0	0.0	0.00	0.0	0.8	0.08	1.4	0.0	0.0	0.9	0.01	0.0	2.5	0.0	0.0	0.0
3 14 78	0.1	0.00			1.1	0.0	0.00	0.0	0.6		1.5	0.0		0.7	0.00	0.0	2.3		0.1	0.0
4 12 78	0.0	0.00	0.0	0.00	1.9	0.0	0.00	0.1	0.1	0.00	2.1	0.5	0.0	1.1	0.00	0.0	2.5	0.0	0.0	0.0
5 8 78	0.1	0.00			2.5	0.0	0.00	0.0	1.2		2.4	0.5		0.9	0.01	0.0	2.0		0.0	0.0
6 6 78	0.0	0.00			1.1	0.0	0.00	0.0	0.8		1.4	0.0		1.0	0.00	0.0	2.6		0.0	0.0
7 6 78	0.0	0.01	0.0	0.00	2.0	0.0	0.01	0.1	1.0	0.04	1.7	0.2	0.0	0.9	0.00	0.0	2.6	0.0	0.1	0.0
8 7 78	0.0	0.02			1.2	0.0	0.00	0.1	1.0		1.1	0.0		0.4	0.01	0.0	2.6		0.0	0.0
9 22 78	0.0	0.01	0.0	0.00	2.4	0.0	0.00	0.1	1.4	0.03	2.2	0.2	0.0	0.8	0.01	0.0	2.8	0.0	0.0	0.0
10 30 78	0.0	0.00			1.5	0.0	0.01	0.0	1.2		1.4	0.0		0.9	0.02	0.0	2.2		0.0	0.0
12 5 78	0.0	0.00			1.3	0.0	0.00	0.0	0.9		0.9	0.0		0.8	0.00	0.0	2.6		0.0	0.0
1 12 79	0.1	0.00	0.1	0.00	1.4	0.0	0.00	0.0	0.9	0.01	1.3	0.0	0.0	0.7	0.02	0.0	2.8	0.0	0.0	0.1
3 9 79	0.0	0.00	0.0	0.00	1.3	0.0	0.01	0.1	1.0	0.06	1.0	0.0	0.0	1.2	0.01	0.0	2.3	0.0	0.0	0.0
4 13 79	0.0	0.00	0.1	0.00	1.1	0.0	0.00	0.1	0.8	0.05	1.2	0.0	0.0	0.7	0.03	0.0	2.6	0.0	0.0	0.1
5 17 79	0.0	0.01			1.5	0.0	0.03	0.0	0.7		1.6	0.2		0.9	0.01	0.0	2.5		0.0	0.0
6 10 79	0.1	0.01			1.5	0.0	0.03	0.1	1.4		1.2	0.2		1.1	0.00	0.0	2.7		0.0	0.1
7 12 79	0.0	0.00	0.0	0.00	1.1	0.0	0.01	0.0	0.7	0.03	1.3	0.0	0.0	0.6	0.00	0.0	2.6	0.0	0.0	0.0
7 27 79	0.0	0.01			1.4	0.0	0.00	0.0	0.9		1.4	0.0		0.7	0.01	0.0	3.5		0.0	0.1

TABLE 117. WATER QUALITY FOR SITE 3292 ROCKCASTLE COUNTY, KENTUCKY

												MILLIGRAMS PER LITER								
DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 N	NO3 AS	NH3 N	TOT N	TOT P	ORTH PO4			
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L											
1	30	78	1	0.08			10	1030	742	1.09	7.1	23	28	0	1.2	500	0.3			
3	14	78	9	0.08			60	744	629	0.76	4.2	0	0	0	1.0	470	0.3			
4	12	78	14	0.025	7		8	699	501	1.08	7.4	30	36	0	1.7	320	0.2			
5	8	78	14	0.2	43*		90	525	398	0.84	7.0	11	13	0	1.1	290	0.2			
6	6	78	22	0.02			60	686	441		7.0	17	21	0		300	0.5			
7	6	78	25	0.0015	44*		45	558	372	0.95	4.9	0	0	0	1.5	260	0.1			
8	7	78	22	0.03	30*		25	647	407	0.85	4.2	0	0	0	1.4	290	0.3			
9	22	78	21	0.0004	69*		30	479	361	1.12	7.0	15	18	0	1.6	230	0.1			
10	30	78	15	0.002	14		5	615	376	1.03	6.7	-3	7	8	0	1.8	250	0.3		
12	5	78	11	0.01	9		5	1270	975	0.90	5.1	0	0	0	0.8	700	0.2			
12	15	78						1500	1230	0.76	6.1	1	1	0	1.0	920				
1	12	79	4	0.004	11		150	955	809	0.93	7.0	20	24	0	1.1	560	0.2			
3	9	79	12	0.005	37		150	831	672	0.93	7.4	20	24	0	1.2	460	0.2			
4	13	79	12	0.02	50	0.85	220	604	421	1.03	5.7	0	0	0	0.8	290	0.3			
5	17	79	20	0.0001	67	0.00	40	645	432	1.03	7.6	8	27	33	0	1.3	290	0.2		
6	10	79	26	0.0001	29		75	608	486	1.14	7.4	9	22	27	0	2.2	310	0.2		
7	12	79	18	0.0004	42*		80	812	568	0.91	7.4	15	18	22	0	1.5	390	0.1		
7	27	79	22	0.03	17		95	884	609	0.95	5.0	32	0	0	0	1.0	430	0.2		
															0.1	0.0	0.21	1.05	0.25	0.01
															0.2	0.0	0.24	0.75	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
1 30 78	0.2	0.00	0.1	0.00	81	0.3	0.00	5.9	9.4	0.45	82	36	0.0	4.8	0.54	0.0	4.1	0.4	0.2	0.3
3 14 78	3.8	0.01			58	0.3	0.01	0.0	5.0		53	23		2.7	0.59	0.0	4.4		0.2	0.4
4 12 78	0.1	0.00	0.0	0.00	48	0.1	0.00	1.4	6.4	0.15	56	34	0.0	4.1	0.23	0.0	3.6	0.2	0.0	0.1
5 8 78	0.1	0.01			34	0.1	0.00	0.1	5.2		38	15		2.9	0.26	0.0	3.3		0.0	0.1
6 6 78	0.1	0.01			44	0.1	0.00	0.9	5.9		46	20		3.9	0.23	0.0	3.9		0.1	0.1
7 6 78	0.1	0.03	0.0	0.00	41	0.2	0.01	2.5	5.3	0.15	35	16	0.0	2.9	0.15	0.1	4.1	0.1	0.1	0.4
8 7 78	1.8	0.03			47	0.2	0.01	1.9	5.0		33	14		1.5	0.30	0.1	3.3		0.1	0.4
9 22 78	0.1	0.04			39	0.1	0.00	0.5	3.9		39	26		3.5	0.11	0.1	3.1		0.2	0.1
10 30 78	0.1	0.01			43	0.1	0.01	0.2	4.8		32	18		14	0.09	0.1	2.0		0.1	0.1
12 5 78	0.7	0.02			110	0.4	0.02	9.1	7.8		84	34		13	0.80	0.2	6.0		0.2	0.6
12 15 78	0.2	0.04			110	0.3	0.01	20	9.0		98	43		11	0.52	0.2	5.3		0.3	0.3
1 12 79	0.3	0.02	0.1	0.00	87	0.2	0.01	13	7.1	0.70	73	33	0.0	7.6	0.44	0.2	4.6	0.3	0.3	0.3
3 9 79	0.2	0.02			72	0.2	0.00	11	5.8		61	28		5.9	0.30	0.1	4.1		0.3	0.2
4 13 79	0.3	0.01	0.2	0.00	53	0.1	0.01	3.2	4.2	0.25	40	15	0.0	4.6	0.28	0.0	3.5	0.2	0.1	0.3
5 17 79	0.1	0.01			47	0.0	0.03	0.9	4.9		43	20		5.2	0.13	0.1	3.4		0.2	0.0
6 10 79	0.1	0.02			52	0.1	0.02	0.9	7.4		54	25		7.9	0.16	0.1	3.8		0.2	0.1
7 12 79	0.1	0.02	0.0	0.00	61	0.2	0.00	2.5	6.4	0.35	48	23	0.0	6.7	0.30	0.1	5.3	0.2	0.2	0.2
7 27 79	0.4	0.03	0.0	0.00	72	0.2	0.02	4.5	6.5	0.45	54	22	0.1	6.4	0.42	0.1	6.2	0.3	0.2	0.3

TABLE 118. WATER QUALITY FOR SITE 3295 ROCKCASTLE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
8 30 77	27	0.02			10	479	325	0.93	3.9			0	0	0	1.3	230	0.2				
10 3 77	17	0.25	65		65	534	312	1.06	4.8			0	0	0	0.7	210	0.3				
11 2 77	13	0.08	28		30	530	383	1.06	4.7			0	0	0	1.0	260	0.2				
11 30 77	10	0.6	6		35	225	168	0.86	4.7			0	0	0	1.5	120	0.2				
12 27 77	4	0.1	4		0	403	268	1.05	4.6			0	0	0	1.2	190	0.2				
12 15 78						480	341	1.12	4.4			0	0	0	0.6	240					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
8 30 77	1.4	0.04			31	0.1	0.00	1.1	3.3		33	10		3.4	0.18	0.0	3.8		0.1	0.2
10 3 77	2.4	0.00	0.0	0.00	32	0.1	0.01	0.7	2.9	0.10	36	8.5	0.0	2.7	0.25	0.0	4.8	0.1	0.0	0.2
11 2 77	1.8	0.03			43	0.1	0.00	0.8	3.4		42	11		3.5	0.24	0.0	4.4		0.0	0.2
11 30 77	1.0	0.00			14	0.0	0.01	0.3	1.9		17	3.2		1.6	0.09	0.0	3.2		0.0	0.1
12 27 77	2.5	0.00			23	0.1	0.00	0.7	2.3		34	7.3		2.3	0.18	0.0	3.8		0.1	0.2
12 15 78	2.6	0.01			37	0.1	0.01	0.9	2.6		41	8.3		3.0	0.20	0.1	4.2		0.1	0.2

TABLE 119. WATER QUALITY FOR SITE 3298 ROCKCASTLE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
12 15 78						410	248	1.37	4.3			0	0	0	0.0	160					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
12 15 78	1.5	0.02			30	0.0	0.01	0.1	2.9		34	6.7		2.6	0.13	0.0	3.6		0.1	0.1

TABLE 120. WATER QUALITY FOR SITE 3301 WAYNE COUNTY, KENTUCKY

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	NO3 NC03	CO3	CL	SD4	NO3 AS N	#NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
8	3	77	20	0.0000			30	308	172	28.7	7.7		137	166	0	1.5	5	2.5					
8	31	77	17	0.15			8				7.6					1.6		0.7					
10	5	77	14	0.3	41		0	315			7.1					1.5	7	0.6					
11	3	77	14	0.2	35		0	306	169	24.1	7.2		136	166	0	2.3	7	0.6					
12	2	77	12	0.8	77*		8	238	154	17.3	8.2		126	151	1	1.9	8	0.6					
12	29	77	2	1.0	6		2	325	148	14.0	7.9		107	130	1	2.1	11	0.5					
2	7	78	9	0.5			0	269	155	15.7	8.2		131	157	1	1.6	9	0.5					
3	20	78	13	0.7			0	253	145	14.5	8.0		120	144	1	2.2	9	0.4					
4	13	78	11	0.8	13		8	202			8.1					4.0	9	0.4					
5	9	78	24	0.7	17*		9	274	157	9.50	8.3		128	152	2	2.8	14	0.3					
6	9	78	14	0.1			20	300	170	12.9	8.3		140	167	2	2.7	10	2.1					
7	7	78	16	0.05	21*		4	278	154	19.4	8.3		140	167	2	2.5	7	0.6					
8	8	78	15	0.5	36*		10	309	164	17.9	8.1		139	166	1	2.0	8	0.7					
9	26	78	15	0.03	35*		7	291	162	14.4	8.2		142	170	2	1.5	10	0.6					
10	31	78	11	0.04	1		0	284	158	17.9	8.5		139	163	3	1.3	8	0.2					
12	5	78	12	0.4	3		30	257	146	15.5	8.1		116	139	1	1.8	9	0.3					
1	18	79	11	0.7	12		2	254	149	19.2	7.8		119	144	1	1.8	8	0.5					
3	5	79	12	0.5	44		5	248	148	12.1	7.9		108	131	1	2.0	12	0.3					
4	5	79	11	0.7			6	231	138	11.8	8.2	-86	101	121	1	1.7	12	0.3					
5	8	79	13	0.2	54	0.00	30	244	163	6.95	8.3		111	133	2	1.5	23	0.3					
6	8	79	15	0.3	58		1	264	127		7.7		97	117	0		12	0.5					
7	2	79	15	0.015	16*		3	260	121	17.7	8.2	-69	89	106	1	2.6	7	0.5	0.3	0.01	0.20	0.20	0.02
7	24	79		0.15	4		8	326	177	18.9	8.3		143	170	2	1.9	9	0.5	0.2	0.02	0.20	0.00	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE			AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																			
8	3	77	0.1	0.00			56	0.0	0.00	0.2	6.9		2.1	0.2		1.0	0.00	0.1	2.1		0.0	0.0
8	31	77	0.1	0.00			55	0.0	0.00	0.1	1.0		6.2	0.1		1.5	0.00	0.0	2.8		0.0	0.0
10	5	77	0.0	0.00	0.1	0.00	55	0.0	0.00	0.0	1.0	0.20	5.7	0.0	0.0	1.3	0.00	0.0	3.2	0.2	0.0	0.0
11	3	77	0.1	0.00			60	0.0	0.00	0.0	1.0		6.6	0.0		1.6	0.01	0.0	3.0		0.0	0.0
12	2	77	0.1	0.01			52	0.0	0.00	0.1	0.9		4.2	0.0		1.2	0.02	0.1	2.9		0.4	0.0
12	29	77	0.1	0.00	0.0	0.00	53	0.0	0.00	0.1	1.0	0.45	6.0	0.0	0.0	1.4	0.02	0.1	2.6	0.3	0.1	0.0
2	7	78	0.1	0.00			50	0.0	0.00	0.0	0.9		5.5	0.0		1.4	0.01	0.0	2.8		0.0	0.0
3	20	78	0.2	0.00			47	0.0	0.00	0.2	0.7		4.5	0.0		1.3	0.00	0.0	2.7		0.1	0.0
4	13	78	0.1	0.00	0.0	0.00	44	0.0	0.00	0.1	1.0	0.15	5.9	0.1	0.0	1.5	0.01	0.0	2.9	0.2	0.0	0.0
5	9	78	0.1	0.00			48	0.0	0.00	0.1	0.8		5.4	0.1		1.6	0.01	0.0	2.4		0.0	0.0
6	9	78	0.1	0.00	0.0	0.00	49	0.0	0.00	0.1	0.8	0.20	5.8	0.0	0.1	1.6	0.00	0.0	2.7	0.2	0.1	0.0
7	7	78	0.1	0.00			46	0.0	0.01	0.0	1.0		5.8	0.0		1.3	0.00	0.1	2.8		0.0	0.0
8	8	78	0.1	0.02			56	0.0	0.00	0.1	0.9		4.0	0.0		0.7	0.01	0.1	2.6		0.0	0.0
9	26	78	0.1	0.00			49	0.0	0.00	0.0	0.8		5.7	0.0		1.0	0.01	0.1	3.1		0.1	0.0
10	31	78	0.1	0.00			50	0.0	0.00	0.0	0.8		5.9	0.0		1.0	0.01	0.1	2.8		0.0	0.0
12	5	78	0.2	0.00			53	0.0	0.00	0.0	1.0		3.3	0.0		1.2	0.00	0.1	2.6		0.0	0.0
1	18	79	0.1	0.00	0.0	0.00	53	0.0	0.00	0.0	0.7	0.25	4.5	0.0	0.0	0.8	0.02	0.1	2.8	0.1	0.1	0.0
3	5	79	0.1	0.00			54	0.0	0.05	0.1	1.3		4.1	0.0		2.0	0.02	0.0	2.4		0.0	0.0
4	5	79	0.2	0.00	0.0	0.00	51	0.0	0.02	0.0	0.8	0.20	3.4	0.0	0.0	1.1	0.00	0.0	2.6	0.1	0.0	0.0
5	8	79	0.5	0.01			57	0.0	0.00	0.2	0.9		5.2	0.1		1.4	0.01	0.0	2.6		0.0	0.0
6	8	79	0.1	0.00			43	0.0	0.00	0.1	1.0		3.8	0.0		1.2	0.00	0.0	2.9		0.0	0.0
7	2	79	0.1	0.00			41	0.0	0.03	0.0	1.0		5.6	0.0		1.6	0.03	0.1	3.0		0.1	0.0
7	24	79	0.1	0.00			63	0.0	0.01	0.0	1.0		5.6	0.2		1.4	0.01	0.1	2.7		0.0	0.0

TABLE 121. WATER QUALITY FOR SITE 3302 WAYNE COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4		
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
8	2	77	22	0.005			10	602	382	1.51	7.7		90	109	0	1.2	200	0.2					
8	31	77	21	0.001			20	957	730	0.89	3.7		0	0	0	1.4	540	0.3					
10	5	77	15	0.004			0	964	662	1.41	7.4		94	115	0	0.8	400	0.1					
11	3	77	14	0.005	15		0	717	469	1.48	7.4		61	74	0	1.4	280	0.1					
12	2	77	7	0.8	86*		10	1340	943	0.75	4.0		0	0	0	0.5	720	0.1					
12	29	77	0	0.0000	19		2	1300	1040	1.00	6.5		5	6	0	1.6	750	0.2					
3	20	78	16	0.15			0	945	695	0.84	4.5		0	0	0	1.7	520	0.3					
4	13	78	12	0.02	4		4	1130	887	0.93	5.8		0	0	0	1.3	660	0.2					
5	9	78	24	0.3	19*		0	759	524	0.90	3.9		0	0	0	0.7	380	0.2					
6	9	78	17	0.15			0	1170	848	0.95	4.6		0	0	0	1.0	610	0.3					
12	5	78	6	0.2	1		25	1120	794	0.96	3.9		0	0	0	0.6	570	0.1					
1	18	79	1	0.1	5		10	1040	814	0.90	4.2	60	0	0	0	0.8	600	0.1					
3	5	79	8	0.02	23		25	762	591	0.91	4.1		0	0	0	0.5	430	0.1					
4	5	79	19	0.1												0.0	370						
5	8	79	15	0.02	523	0.12	2400	815	652	0.87	4.4	31	0	0	0	0.7	480	0.9					
6	8	79	20	0.0005	270		33000	1110	890	0.90	5.1	14	0	0	0	0.7	660	0.1					
7	2	79	20	0.004		0.01	850	1020	814	0.84	5.7	5	0	0	0	0.9	610	0.3	0.2	0.11	0.30	0.25	0.01
7	25	79	23	0.02	921		4400	1100	743	0.91	4.6	41	0	0	0	1.0	540	0.2	0.2	0.05	0.70	0.60	0.02

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 2 77	0.4	0.00			79	0.0	0.00	0.2	2.3		29	1.0		3.0	0.02	0.0	2.9		0.0	0.0
8 31 77	4.4	0.01			100	0.1	0.01	0.3	6.2		56	7.3		4.9	0.22	0.1	5.8		0.1	0.2
10 5 77	0.2		0.0	0.00	130	0.0	0.00	0.1	1.7	0.35	57	0.0	0.1	5.6	0.01	0.1	2.6	0.5	0.1	0.0
11 3 77	0.1	0.03			96	0.0	0.00	0.0	3.6		43	0.4		3.9	0.04	0.0	3.0		0.1	0.0
12 2 77	16	0.00			93	0.1	0.02	0.5	3.8		77	12		4.8	0.39	0.0	8.3		0.0	0.3
12 29 77	0.8	0.03	0.0	0.00	140	0.2	0.01	0.1	4.9	1.0	110	13	0.1	5.9	0.32	0.1	6.6	1.3	0.2	0.2
3 20 78	5.8	0.03			72	0.1	0.01	0.5	4.4		64	9.6		3.5	0.25	0.0	6.7		0.1	0.2
4 13 78	1.0	0.03	0.0	0.00	110	0.1	0.01	0.2	5.0	0.45	89	1.1	0.0	5.0	0.26	0.0	6.6	0.7	0.1	0.2
5 9 78	6.7	0.03			57	0.1	0.01	2.3	3.6		49	6.6		3.1	0.22	0.0	6.9		0.1	0.2
6 9 78	6.3	0.05	0.0	0.00	100	0.2	0.01	0.1	5.8	0.40	82	12	0.1	5.4	0.31	0.1	9.8	0.8	0.2	0.3
12 5 78	11	0.05			98	0.2	0.02	2.5	4.3		76	11		3.5	0.38	0.2	9.1		0.2	0.4
1 18 79	8.8	0.02	0.0	0.00	100	0.2	0.02	0.2	4.1	0.70	70	9.8	0.0	4.0	0.32	0.2	6.8	0.5	0.2	0.2
3 5 79	6.6	0.03			74	0.1	0.02	1.6	3.5		52	7.1		2.8	0.23	0.1	6.0		0.1	0.7
4 5 79	0.8	0.02	0.2	0.01	65	0.1	0.01	0.1	2.8	0.30	43	5.4	0.1	2.2	0.17	0.1	4.9	0.3	0.2	0.1
5 8 79	5.9	0.04			80	0.1	0.02	0.4	3.7		55	6.8		3.0	0.21	0.1	6.9		0.2	0.2
6 8 79	1.1	0.04			120	0.1	0.01	0.1	4.2		75	9.5		4.1	0.21	0.1	9.9		0.2	0.2
7 2 79	0.2	0.04	0.1	0.00	99	0.1	0.00	0.1	5.3	0.60	66	7.8	0.0	5.3	0.16	0.1	8.0	0.8	0.2	0.0
7 25 79	5.3	0.06			97	0.1	0.06	0.0	5.5		62	7.9		4.4	0.24	0.1	8.6		0.2	0.2

TABLE 122. WATER QUALITY FOR SITE 3311 WHITLEY COUNTY, KENTUCKY

																NO3 #NO3 NH3 TOT TOT ORTH								
WATER		EST	SUSP	SETT	SPEC		DIS	NEUT	LAB	ACID-	ALKA-													
DATE	TEMP	DISCH	SOL	MATTER	TURB	COND	SOLID	RATIO	PH	ITY	LINITY	HCO3	CO3	CL	SO4	AS N	AS N	AS N	N	P	PO4			
MO	DA	YR	DEG	C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	----- MILLIGRAMS PER LITER -----													
6	2	77	18	0.04				25	62	43	2.52	6.5		19	23	0	0.8	12						
7	11	77	21	0.005				20	73	53	3.06	7.3		25	30	0	0.7	12	0.1					
8	4	77	20	0.006				10	90	51	2.13	6.7		20	24	0	0.8	15	0.0					
9	1	77	21	0.009				10	73	45	2.67	6.1		16	19	0	0.9	12	0.0					
10	6	77	15	0.006				15	70	44	2.16	6.5		16	19	0	2.3	12	0.0					
11	2	77	14	0.008		22		8	82	43	2.51	7.2		13	16	0	0.8	13	0.0					
12	1	77	10	0.3	85*			10	50	31	1.37	6.3		5	6	0	0.7	13	0.0					
12	28	77	3	0.15	0			0	63	43	1.66	7.0	-5	10	12	0	1.2	16	0.1					
2	7	78	0	1.0				0	63	42	1.62	6.8		8	10	0	1.0	17	0.1					
3	20	78	10	0.3		1		6	55	38	1.42	6.7		7	9	0	1.1	16	0.0					
4	13	78	9	0.25		15		10	64	40	2.20	7.0		9	11	0	1.0	14	0.0					
5	10	78	25	0.09		8			64	42	1.69	7.1		9	11	0	0.7	16	0.1					
6	8	78	17	0.05				30	59	42	1.76	6.9		11	13	0	0.9	15	0.2					
7	18	78	18	0.015				10	62	45	2.30	7.1		14	17	0	0.8	14	0.1					
8	8	78	21	0.05		35*		10	64	41	2.13	7.0		15	18	0	1.1	11	0.2					
9	27	78	18	0.0000		29*		50	89	60	2.70	7.6		30	36	0	1.0	15	0.1					
11	1	78	10	0.0000		13		25	85	55	2.54	7.5	-22	26	32	0	0.9	14	0.0					
12	1	78	8	0.001		4		5	71	43	1.77	6.3		10	12	0	0.7	16	0.0					
1	16	79	0	0.01		9		3	55	40	1.28	6.3		5	6	0	1.2	18	0.1					
3	6	79	6	0.03		6		7	45	41	1.08	6.6	-2	4	5	0	0.6	21	0.0					
4	13	79	13	0.05		10	0.00	15	49	36	1.24	6.6		4	5	0	0.8	15	0.1					
5	9	79	15	0.01		5	0.00	40	65	45	1.71	7.1		8	10	0	0.7	17	0.1					
6	7	79	17	0.001		6		10	55	38	1.35	6.4	-4	9	11	0	1.0	15	0.0					
7	8	79	18	0.01		72*		70	54	37	1.54	7.0	-5	11	13	0	0.9	13	0.2	0.2	0.00	0.90	0.15	0.01
7	24	79	25	0.08		4	0.01	20	57	40	1.68	7.2	-4	9	11	0	0.7	14	0.0	0.0	0.05	0.60	0.10	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN	
MO	DA	YR	MILLIGRAMS PER LITER																			
6	2	77	0.1	0.00		2.6	0.1	0.03	0.0	2.0		3.3	0.1		3.0	0.04	0.1	3.5		0.0	0.0	
7	11	77	0.0	0.01		4.4	0.0	0.00	0.1	1.9		4.2	0.1		4.0	0.01	0.0	4.8		0.0	0.0	
8	4	77	0.1	0.00		3.4	0.0	0.00	0.1	2.1		3.6	0.0		4.3	0.00	0.0	4.5		0.0	0.0	
9	1	77	0.0	0.01		3.8	0.0	0.00	0.1	1.7		3.7	0.0		3.6	0.00	0.0	4.6		0.0	0.0	
10	6	77	0.0		0.0	0.00	3.7	0.0	0.00	0.1	1.3	0.00	2.9	0.0	0.0	3.3	0.00	0.0	4.1	0.0	0.0	0.0
11	2	77	0.0	0.00		3.8	0.0	0.00	0.0	1.6		3.6	0.0		3.6	0.00	0.0	4.3		0.0	0.0	
12	1	77	0.0	0.00		2.0	0.0	0.00	0.0	0.5		2.1	0.0		2.5	0.00	0.0	3.3		0.0	0.0	
12	28	77	0.1	0.00	0.0	0.00	3.0	0.1	0.00	0.1	1.3	0.20	3.6	0.0	0.0	2.8	0.02	0.1	3.8	0.0	0.2	0.0
2	7	78	0.1	0.00		2.9	0.0	0.00	0.1	1.2		3.5	0.0		3.1	0.01	0.0	3.7		0.0	0.0	
3	20	78	0.0	0.00		2.4	0.0	0.00	0.0	1.2		2.8	0.0		2.5	0.00	0.0	3.5		0.1	0.0	
4	13	78	0.1	0.00	0.0	0.00	3.2	0.0	0.00	0.1	1.8	0.00	3.7	0.0	0.0	3.2	0.02	0.0	3.9	0.0	0.0	0.0
5	10	78	0.0	0.01		3.0	0.0	0.00	0.1	1.2		3.3	0.0		2.9	0.00	0.0	4.1		0.0	0.0	
6	8	78	0.0	0.00		3.0	0.0	0.00	0.1	1.4		3.2	0.0		3.1	0.00	0.0	3.6		0.0	0.0	
7	18	78	0.0	0.00	0.0	0.00	4.2	0.0	0.00	0.1	1.7	0.03	3.6	0.0	0.0	3.0	0.00	0.0	4.1	0.0	0.0	0.0
8	8	78	0.0	0.02		3.5	0.0	0.00	0.1	1.6		2.9	0.0		1.8	0.01	0.0	4.1		0.0	0.1	
9	27	78	0.1	0.01		5.5	0.0	0.01	0.2	2.3		4.8	0.2		3.2	0.01	0.0	4.7		0.0	0.0	
11	1	78	0.0	0.00		4.9	0.0	0.00	0.2	1.8		4.4	0.2		3.0	0.01	0.0	4.4		0.0	0.0	
12	1	78	0.1	0.00		3.5	0.0	0.01	0.2	1.3		3.2	0.0		3.5	0.02	0.0	3.8		0.0	0.0	
1	16	79	0.0	0.00	0.1	0.00	2.8	0.0	0.00	0.0	1.2	0.07	2.9	0.0	0.0	2.8	0.00	0.0	3.4	0.0	0.0	0.1
3	6	79	0.1	0.01	0.4	0.00	2.7	0.0	0.00	0.1	1.1	0.15	2.9	0.0	0.0	1.8	0.01	0.0	3.6	0.0	0.0	0.6
4	13	79	0.1	0.00	0.2	0.00	2.4	0.0	0.00	0.1	1.1	0.09	2.3	0.0	0.0	2.1	0.00	0.0	3.7	0.0	0.0	0.2
5	9	79	0.0	0.00		3.9	0.0	0.02	0.1	1.5		3.6	0.0		2.7	0.00	0.0	4.4		0.0	0.1	
6	7	79	0.1	0.00		2.4	0.1	0.03	0.1	1.3		2.4	0.0		2.0	0.00	0.1	4.0		0.0	0.0	
7	8	79	0.1	0.00	0.0	0.00	3.0	0.0	0.00	0.1	1.4	0.06	2.2	0.0	0.0	2.1	0.00	0.0	3.2	0.0	0.0	0.0
7	24	79	0.1	0.01		3.3	0.0	0.00	0.1	1.3		2.8	0.0		2.1	0.02	0.0	4.5		0.0	0.0	

TABLE 123. WATER QUALITY FOR SITE 3312 WHITLEY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
10 6 77	16	0.05	80		150	350	223	1.63	7.2		62	76	0	2.1	110	0.7					
11 2 77	18	0.04	140		150	360	218	2.32	7.8		67	81	0	2.4	90	0.2					
12 1 77	11	1.0	192*		320	428	252	1.90	7.8		70	84	0	1.5	120	0.7					
12 28 77	4	0.25	4		0	539	364	1.65	7.5		62	76	0	1.5	170	8.2					
2 1 78	1	0.4			75	592	385	1.85	8.1		105	126	1	1.8	190	1.5					
3 17 78	5	0.25	116		170	490	281	1.51	7.9		84	101	1	2.4	140	1.0					
4 11 78	11	0.07	12		30	549	346	1.85	8.2		96	115	1	2.2	170	0.3					
5 10 78	25	0.1	22*		55	471	287	1.69	7.7		83	100	0	1.8	140	0.6					
6 8 78	20	1.5	2910*		4500	265	162	1.49	7.5		25	31	0	1.2	82	2.7					
7 18 78	20	0.15	92*		8	506	315	1.65	8.2		89	106	1	1.8	160	0.2					
8 9 78	23	0.2	34*		100	458	248	1.62	8.0		75	90	1	2.1	120	0.4					
9 27 78	23	0.006	14		15	486	308	1.48	8.0		90	109	1	2.4	160	0.1					
11 1 78	11	0.005	10		0	462	293	1.66	8.3	-93	101	120	2	2.1	140	0.0					
12 1 78	6	0.015	8		3	520	355	1.57	8.3		90	107	1	1.8	190	0.1					
1 16 79	0	0.03	12		20	576	387	1.81	8.0	-100	98	118	1	1.9	190	0.6					
3 6 79	6	0.03	60		35	573	397	1.42	7.9	-100	98	119	1	1.9	220	0.9					
4 12 79	14	0.08	73	0.00		493	309	1.59	8.0	-71	66	79	1	1.4	170	0.5					
5 9 79	17	0.015	20	0.00	35	547	393	1.65	7.9	-100	110	133	1	1.5	200	0.4					
6 8 79	20	0.02	54		60	621	407	1.63	8.3	-96	108	129	2	2.2	210	0.4					
7 9 79	19	0.3	728*	0.70	170	419	272	1.35	8.1	-62	66	80	1	1.9	150	0.3	0.1	0.05	1.35	0.75	0.01
7 24 79	21	0.006	83	4.0	210	615	348	1.80	8.4	-98	107	127	2	1.7	170	0.2	0.0	0.05	0.55	0.05	0.00

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 6 77	0.1		0.0	0.00	26	0.0	0.01	0.4	3.6	0.05	22	0.9	0.0	13	0.01	0.0	4.0	0.1	0.0	0.0
11 2 77	0.1	0.03			28	0.0	0.00	0.1	3.7		28	1.0		14	0.02	0.0	4.4		0.0	0.0
12 1 77	0.1	0.01			27	0.0	0.00	0.1	3.6		36	0.6		10	0.01	0.0	4.1		0.0	0.0
12 28 77	0.1	0.03	0.1	0.00	31	0.2	0.00	0.4	4.3	0.20	51	2.3	0.0	15	0.06	0.2	4.7	0.2	0.4	0.0
2 1 78	0.1	0.00			47	0.0	0.01	0.2	4.5		49	0.6		18	0.03	0.0	3.5		0.1	0.1
3 17 78	0.1	0.00			26	0.0	0.00	0.0	3.8		32	0.5		13	0.00	0.0	3.4		0.2	0.0
4 11 78	0.2	0.02	0.0	0.00	40	0.0	0.01	0.5	4.8	0.15	43	0.6	0.0	21	0.03	0.0	2.0	0.2	0.1	0.0
5 10 78	0.1	0.03			30	0.0	0.00	0.1	4.1		34	0.6		15	0.01	0.0	3.3		0.0	0.0
6 8 78	0.4	0.01			16	0.0	0.00	0.4	3.9		19	0.5		6.8	0.01	0.0	2.0		0.0	0.0
7 18 78	0.1	0.03	0.1	0.00	40	0.0	0.00	0.2	4.8	0.10	32	0.6	0.0	16	0.00	0.0	3.2	0.2	0.0	0.0
8 9 78	0.1	0.03			33	0.0	0.00	0.2	4.1		26	0.6		6.6	0.02	0.1	3.2		0.1	0.0
9 27 78	0.1	0.03			35	0.0	0.00	0.3	4.4		29	0.5		16	0.02	0.1	3.2		0.1	0.0
11 1 78	0.1	0.02			37	0.0	0.00	0.1	3.2		31	0.4		12	0.02	0.1	2.3		0.1	0.0
12 1 78	0.1	0.02			47	0.0	0.00	0.3	4.1		39	1.0		11	0.02	0.0	2.8		0.1	0.0
1 16 79	0.1	0.00	0.2	0.00	58	0.0	0.00	0.3	3.9	0.15	47	0.9	0.0	12	0.02	0.1	3.2	0.2	0.0	0.2
3 6 79	0.1	0.02			48	0.0	0.01	0.1	4.2		42	0.4		13	0.03	0.0	3.3		0.1	0.5
4 12 79	0.1	0.01	0.2	0.00	39	0.1	0.02	0.1	3.4	0.25	38	0.4	0.0	11	0.04	0.0	3.0	0.2	0.1	0.1
5 9 79	0.1	0.03			54	0.0	0.01	0.1	3.9		45	0.4		12	0.02	0.0	2.9		0.0	0.1
6 8 79	0.1	0.03			53	0.0	0.01	0.2	4.4		44	0.6		19	0.02	0.0	3.2		0.1	0.0
7 9 79	0.3	0.02	0.0	0.00	33	0.0	0.01	0.2	5.2	0.15	26	0.4	0.0	8.2	0.02	0.0	2.7	0.1	0.1	0.0
7 24 79	0.3	0.03			48	0.0	0.02	0.3	4.3		40	0.9		13	0.01	0.0	3.3		0.1	0.0

TABLE 124. WATER QUALITY FOR SITE 3313 WHITLEY COUNTY, KENTUCKY

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	CO3	CL	SO4	NO3 AS N	NH03 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
----- MILLIGRAMS PER LITER -----																					
9 1 77	20	0.006			35	403	233	1.12	6.4		17	21	0	8.2	140	0.1					
10 6 77	17	0.01	31		55	364	228	1.19	7.1		20	25	0	7.3	130	0.0					
11 2 77	16	0.005	16		35	374	233	1.32	7.3		15	18	0	7.9	140	0.0					
12 1 77	11	0.05	82*		8	271	178	1.30	7.5		9	11	0	2.4	110	0.1					
12 28 77	8	0.02	6		0	336	213	1.36	7.2		6	7	0	3.1	130	0.1					
2 1 78	3	0.15			15	121	71	1.32	6.6		4	5	0	0.8	39	0.1					
3 17 78	5	0.05	1		2	277	164	1.03	6.8		8	10	0	2.5	110	0.1					
4 11 78	13	0.015	12		20	333	206	1.19	7.1		10	12	0	2.9	130	0.1					
5 10 78	25	0.02	30*		35	286	182	1.22	7.2		12	15	0	2.6	110	0.2					
6 8 78	18	0.01			55	287	192	1.11	6.9		12	15	0	1.1	120	1.6					
7 18 78	17	0.015	377*		90	313	186	1.32	7.5		21	26	0	3.5	110	0.0					
8 9 78	19	0.01	34*		50	294	163	1.39	7.2		15	18	0	4.5	89	0.2					
9 27 78	18	0.6	50*		15	369	233	1.05	6.4		27	33	0	5.8	140	0.0					
11 1 78	13	0.0001	29		4	394	234	1.12	7.6	-19	23	28	0	10	130	0.1					
12 1 78	7	0.0004	2		1	377	236	1.26	6.6		25	30	0	9.3	130	0.0					
1 15 79	4	0.008	6		40	287	174	1.23	6.5		9	11	0	2.9	110	0.1					
3 6 79	8	0.002	11		3	262	167	1.33	6.7	-7	9	11	0	2.2	100	0.1					
4 12 79	15	0.0001		0.00		246	152	1.32	7.0	-8	10	12	0	1.9	92	0.0					
5 9 79	15	0.0001	60	0.06	60	262	164	1.20	6.9	-6	11	13	0	2.0	100	0.2					
6 8 79	18	0.0000	35		40	255	165	1.29	7.1	-7	13	16	0	1.9	100	0.1					
7 24 79	19	0.0003	77*		80	319	205	1.23	7.4		16	20	0	2.6	130	0.0	0.1	0.01	0.85	0.35	0.01
10 18 79		0.002	36		70	325	154	1.14	7.0	-12	22	27	0	6.8	89	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----- MILLIGRAMS PER LITER -----																			
9 1 77	0.1	0.07			20	0.0	0.01	3.3	4.8		22	2.9		13	0.00	0.0	3.9		0.0	0.0
10 6 77	0.1		0.0	0.00	22	0.0	0.00	2.8	4.2	0.04	21	2.5	0.0	13	0.02	0.0	4.5	0.2	0.0	0.0
11 2 77	0.0	0.00			22	0.0	0.00	2.3	4.5		26	2.6		14	0.03	0.0	4.2		0.0	0.0
12 1 77	0.1	0.05			17	0.0	0.00	0.3	3.4		22	0.3		6.8	0.02	0.1	4.8		0.2	0.0
12 28 77	0.1	0.07	0.3	0.00	22	0.2	0.01	0.2	3.8	0.15	29	0.2	0.0	6.8	0.07	0.2	4.5	0.3	0.0	0.1
2 1 78	0.1	0.00			6.1	0.0	0.01	0.2	1.7		7.2	0.5		3.5	0.03	0.0	4.4		0.0	0.1
3 17 78	0.1	0.03			17	0.0	0.00	0.1	3.0		15	0.1		5.6	0.02	0.0	4.5		0.2	0.0
4 11 78	0.1	0.04	0.0	0.00	21	0.0	0.00	0.3	3.8	0.06	23	0.2	0.0	6.4	0.01	0.0	5.1	0.2	0.0	0.0
5 10 78	0.0	0.04			18	0.0	0.00	0.0	4.2		20	0.0		6.7	0.00	0.0	4.4		0.0	0.0
6 8 78	0.1	0.04			18	0.0	0.00	0.1	3.4		20	0.1		6.2	0.00	0.0	4.3		0.0	0.0
7 18 78	0.0	0.05	0.0	0.00	19	0.0	0.01	2.4	3.9	0.07	20	2.3	0.0	6.4	0.00	0.0	4.3	0.2	0.0	0.0
8 9 78	0.1	0.06			19	0.0	0.00	1.0	3.6		15	0.7		9.3	0.02	0.0	4.8		0.1	0.1
9 27 78	0.1	0.09			18	0.0	0.00	8.8	4.6		21	4.6		8.8	0.03	0.1	4.5		0.1	0.0
11 1 78	0.1	0.08			19	0.0	0.01	5.0	4.1		23	5.4		10	0.04	0.0	4.1		0.1	0.0
12 1 78	0.1	0.07			22	0.0	0.01	3.5	4.2		24	3.5		12	0.04	0.1	4.9		0.1	0.0
1 15 79	0.1	0.03	0.1	0.00	21	0.0	0.01	0.1	2.9	0.15	18	0.0	0.0	6.1	0.02	0.0	4.0	0.1	0.1	0.2
3 6 79	0.1	0.04			18	0.0	0.01	0.1	2.8		21	0.1		4.9	0.02	0.0	4.4		0.0	0.7
4 12 79	0.1	0.03	0.2	0.00	17	0.0	0.02	0.1	2.6	0.10	18	0.1	0.0	4.3	0.03	0.0	4.4	0.2	0.0	0.1
5 9 79	0.1	0.04			17	0.1	0.01	0.1	2.6		19	0.1		4.3	0.02	0.1	4.1		0.0	0.1
6 8 79	0.1	0.04			19	0.0	0.00	0.1	3.0		19	0.0		4.6	0.02	0.0	4.6		0.0	0.0
7 24 79	0.1	0.08	0.0	0.00	22	0.0	0.01	0.2	3.5	0.10	23	0.2	0.0	5.9	0.03	0.0	5.7	0.2	0.1	0.0
10 18 79	0.1	0.06			8.1	0.1	0.00	3.3	1.6		21	1.2		3.0	0.09	0.5	2.3		0.1	0.0

TABLE 125. WATER QUALITY FOR SITE 3315 WHITLEY COUNTY, KENTUCKY

TABLE 125. WATER QUALITY FOR SITE 3010 MW-1																						
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER												
6	2	77	22	0.01			30	159	97	2.25	7.2		52	64	0	1.8	31					
7	11	77	28	0.04			45	345	174	1.45	7.0		24	29	0	1.7	100	0.1				
8	4	77	24	0.02			20	326	179	2.30	7.4		60	73	0	1.6	72	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 2 77	0.1	0.00			7.7	0.1	0.03	0.0	2.8		7.9	0.5		7.6	0.05	0.2	2.6		0.1	0.0
7 11 77	0.0	0.01			22	0.0	0.00	0.1	3.7		19	1.3		7.0	0.03	0.1	2.0		0.0	0.0
8 4 77	0.1	0.01			24	0.0	0.00	0.2	3.6		20	1.1		12	0.01	0.0	3.0		0.0	0.0

TABLE 126. WATER QUALITY FOR SITE 3316 WHITLEY COUNTY, KENTUCKY

TABLE 128. WATER QUALITY FOR DATE 6/20/77																						
DATE		WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER												
6	2	77	20	0.04			4	1630	1790	0.55	5.5		0	0	0	2.4	1500					
7	11	77	22	0.01			85	2190	1970	0.82	6.3		12	15	0	2.2	1500	1.0				
8	4	77	22	0.1			110	2240	2040	0.88	6.1		17	21	0	2.2	1500	0.2				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
6 2 77	0.4	0.04			110	0.4	0.04	3.8	6.9		120	49		24	0.41	0.4	5.2		0.4	0.2
7 11 77	0.2	0.04			210	0.3	0.00	0.8	7.9		160	78		31	0.40	0.1	5.4		0.1	0.2
8 4 77	0.4	0.05			240	0.4	0.00	9.6	8.9		160	89		40	0.51	0.2	7.8		0.0	0.2

TABLE 127. WATER QUALITY FOR SITE 3319 WHITLEY COUNTY, KENTUCKY

TABLE 1277 WATER QUALITY FOR STATE CDDP DISTRICT 1000																						
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DATE		AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																		
7	24	79	0.2	0.04		11	0.0	0.01	0.2	2.1		6.6	0.1		2.2	0.02	0.1	5.9		0.1	0.0

Headquarters of the Northeastern Forest Experiment Station are in Broomall, Pa. Field laboratories are maintained at:

- Amherst, Massachusetts, in cooperation with the University of Massachusetts.
 - Berea, Kentucky, in cooperation with Berea College.
 - Burlington, Vermont, in cooperation with the University of Vermont.
 - Delaware, Ohio.
 - Durham, New Hampshire, in cooperation with the University of New Hampshire.
 - Hamden, Connecticut, in cooperation with Yale University.
 - Morgantown, West Virginia, in cooperation with West Virginia University, Morgantown.
 - Orono, Maine, in cooperation with the University of Maine, Orono.
 - Parsons, West Virginia.
 - Princeton, West Virginia.
 - Syracuse, New York, in cooperation with the State University of New York College of Environmental Sciences and Forestry at Syracuse University, Syracuse.
 - University Park, Pennsylvania, in cooperation with the Pennsylvania State University.
 - Warren, Pennsylvania.
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